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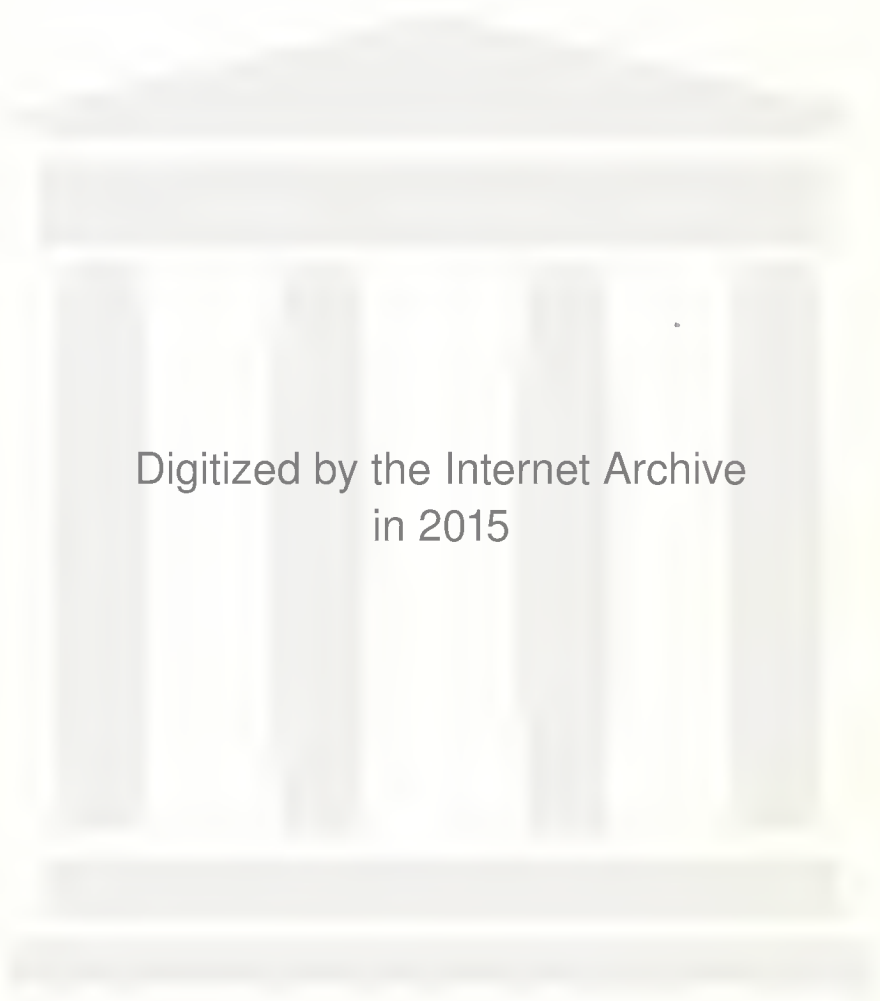
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MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



A BULLETIN OF INFORMATION FOR THE PUBLIC

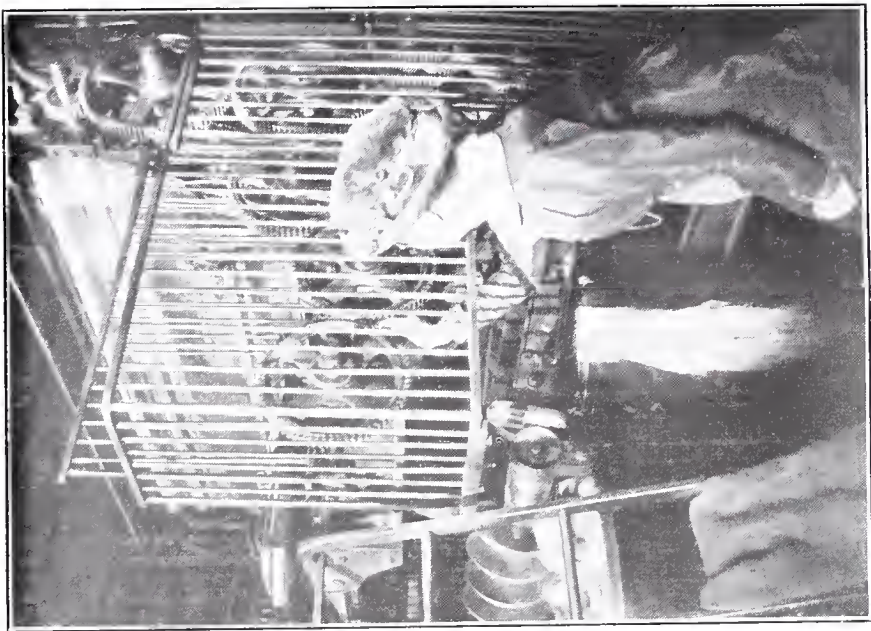
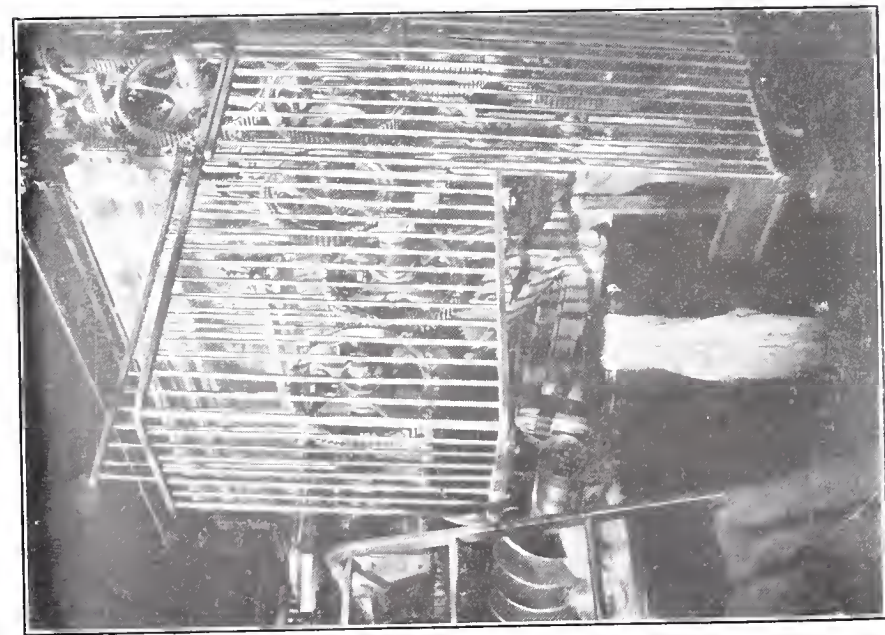
JANUARY, 1916

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1916

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How woman's hand was injured in a textile mill See page 9

DEPARTMENT OF LABOR AND INDUSTRY

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THE RISKS TO HEALTH IN THE INDUSTRIES

There is no more important subject before the industrial world today than that of the hygiene of occupations or in other words the prevention of vocational diseases and industrial accidents.

Health is the principal capital of the working man and any impairment of that asset due to vocational disease or industrial accident is a tragedy often attended by poverty and hunger.

Progressive manufacturers have come to realize that the good health of their work people is an essential to business success. An impairment of health in the worker means decreased efficiency and a corresponding increase in manufacturing costs. The importance of conserving the health of workers has within recent years been realized by the law-making bodies of all civilized countries and all have adopted laws relative at least to some phase of the question.

The scope of these papers does not include the detailed consideration of this vast amount of legislation. It is a rightful function of the State to throw around the labor that resides within its borders the protecting cloak of laws for the prevention of vocational diseases and accidents. Those workers whose health is permanently impaired as the result of their labor eventually become a financial burden upon the State.

The first legislation by England on this subject began by the investigation of a Royal Commission which was followed in 1833, by the passage of a "Factory Law" by Act of Parliament. Labor legislation in Germany dates from 1859, and in France from 1874. A consideration of all the legislation would cover countless pages.

The first law in relation to labor in our Commonwealth was passed in 1713, and deals with the subject of "apprentices". In the more than two hundred years which have since passed, many labor laws have been created; some later amended, and still others repealed. There are, however, some laws which have a direct bearing upon our subject, and these will be briefly considered.

Synopsis of the Laws of Pennsylvania Relating to Industrial Hygiene

The principal features of the statutes applying to Industrial Hygiene in Pennsylvania are here summarized. The enforcement of these statutes is imposed upon the Department of Labor and Industry.

I. The Department of Labor and Industry Act of 1913 (P. L. 396).

Section 9. Provides for medical inspection of working places relative to the conditions of work affecting the health of persons employed therein.

Section 10. Establishes a Division of Industrial Hygiene which shall make special inspections and investigations of industrial processes and conditions with respect to the dangers connected therewith, and the precautions necessary to avoid them.

Section 14. Makes provision for the reasonable and adequate protection of the life, health, safety, and morals of all persons in all places where labor is employed.

II. The Factory Act of May 2, 1905 (P. L. 352).

Section 11. Provides for the installation of suitable and sufficient exhaust fans or other devices for the removal of poisonous fumes and gases, and dust from dust creating machinery.

Section 13. Provides for adequate air space, sanitation, and lighting in individual establishments.

Section 17. Requires the workroom in bake shops to be separated from any sleeping room, and forbids water closet, urinal, defective drain, or sewer pipe to be located in such workroom. The harboring of domestic animals is also forbidden. And it provides for a sanitary condition of the floors, walls and ceilings.

III. The Child Labor Act of May 13, 1915 (P. L. 177).

This Act provides for the health, safety and welfare of minors by forbidding their employment in certain hazardous occupations and under certain specified ages; by restricting their hours of labor and regulating certain conditions of their employment; by requiring employment certificates for certain minors; by requiring attendance at continuation schools of certain minors during the period of their employment.

IV. The Foundry Act of June 7, 1911 (P. L. 673), amended April 4, 1913.

This Act requires all foundries where iron, steel, brass or other metal is cast wherein ten or more men shall be employed to be provided with convenient and adequate toilet rooms, equipped with proper washbowls, sinks, hot and cold water; also suitable water-closets which shall be separate from the toilet rooms.

Section 2. Said toilet rooms and water-closets shall be connected with the foundry building in such a way as to afford easy access thereto without the exposure to the open air, and they shall be properly heated, ventilated, cleaned, and protected from the dust of the foundry.

V. The Blower Act of July 24, 1913 (P. L. 970).

This Act provides for the protection of the health and lives of the employees in certain dusty trades by requiring the use of blowers and exhausts with a specific equipment and regulating the use of such blower systems.

VI. The Woman's Act of July 25, 1913 (P. L. 1024)

This Act protects the health and welfare of females by regulating their employment in certain establishments with respect to hours of labor and conditions of employment; by establishing certain sanitary regulations in the establishments in which they work concerning wash and dressing rooms; also lunch rooms, seats, exhaust fans and drinking water.

VII. The Lead Poisoning Act of July 26, 1913 (P. L. 1363).

To prevent occupational disease with special reference to the manufacture of certain lead products or compounds, this Act provides as follows:

1. Employers must provide reasonably effective devices, means, and methods to prevent industrial diseases.

2. Processes especially dangerous in the manufacture of certain lead compounds are named.

3. The duties of employers regarding devices and means for the prevention of industrial disease are given in relation to:

- (a) Workrooms—their lighting and ventilation; separation of dusty from non-dusty processes; proper cleaning, efficient air exhausts and dust collecting systems.

- (b) Washrooms—separate from workroom. Equipment: basins with waste pipes and two spigots conveying hot and cold water, or suitable troughs; one basin for each five employes; nail brushes and soap; three clean towels per week.

- (c) Shower baths—one for each ten employes; supplied with soap and two clean towels per week; approached by wooden runways, and provided with movable wooden floor gratings; supplied with controlled hot and cold water.

- (d) Dressing-rooms—separate from workrooms; provided with a double or two single sanitary lockers for each employe.

- (e) Eating rooms—separate from workrooms; provided with a sufficient number of tables and seats, and kept clean. Cleanliness is required throughout such establishments.

- (f) Drinking fountains.

- (g) Clothing—one pair of overalls and one pair of jumpers supplied to each employe, repaired or renewed when necessary and washed weekly.

- (h) Respirators—one effective respirator for each employe exposed to lead fumes, gases, or solutions; to be renewed when necessary.

4. Employees must use the appliances supplied by the employer.

5. Notices in various languages concerning the known dangers arising in the various processes and simple instructions to employees

shall be posted by the employer in conspicuous places in the work rooms, also in the wash, dressing, and eating rooms. These notices shall be prepared and furnished by the Commissioner of Labor and Industry. These notices shall be explained by the employer to every employee when he enters such work or processes, interpreters to be provided when necessary.

6. Every employe engaged in the dangerous processes specified must be examined at least once a month by a licensed physician, designated and paid by the employer; such examination to be made during working hours and at employer's expense.

7. The examining physician must make a record of the symptoms of lead poisoning found and certain other specified data in a book provided for that purpose, and kept in the employer's office. This record is to be open to inspection at all reasonable times by the State Department of Labor and Industry, and by the State Board of Health.

In addition thereto, within 48 hours after such examination and finding, the examining physician shall send a report thereof to the State Department of Labor and Industry, and to the Health Department of the State, upon blanks furnished for this purpose by the Health Department.

A report must also be made within 48 hours to the employer, who, within five days shall remove the employee from any work in which he might be exposed to lead poisoning.

VIII. Bakery Act of 1901 (P. L. 37).

Section 2. Provides for the draining and plumbing of bakeshops in accordance with the rules and regulations governing house drainage and plumbing; provides also for efficient ventilation in the same.

Section 7. Forbids the employment in bakeshops of any person affected with consumption of the lungs, scrofulous diseases, or with any venereal disease, or any communicable skin affection.

IX. Mattress Act of May 1, 1913 (P. L. 134).

This Act regulates the making and remaking and sale of mattresses, and prohibits the use of unsanitary and unhealthy materials therein.

Occupational Health Risks

A health risk or hazard in industry may be defined as any substance or any condition, in fact, anything that causes physical deterioration in the worker. It upsets the physiological equilibrium of the human body.

These health hazards may be classified as follows:

1.—DUST.

This may be of animal, vegetable, or mineral origin; and is derived from certain trade processes.

2.—INDUSTRIAL POISONS.

These poisons consist of toxic metals and their compounds, poisonous gases, vapors and fumes, and poisonous fluids.

3.—FATIGUE.

4.—VITIATED AIR.

5.—INFECTIONS.

Certain occupations subject the workers therein to dangers from infections. The most common of these diseases are as follows:

Hook Worm Disease.

Anthrax.

Tetanus.

Glanders.

Foot and Mouth Disease.

Septicaemia, or Blood Poisoning.

Industrial Tuberculosis.

6.—EXCESSIVE HEAT.

7.—EXCESSIVE COLD.

8.—EXCESSIVE MOISTURE.

9.—DRYNESS OF THE ATMOSPHERE.

10.—FAULTY ILLUMINATION.

11.—ABNORMAL AIR PRESSURE.

12.—INTEMPERANCE.

These hazards will be given full consideration in subsequent papers.

PREVENTABLE ACCIDENTS

The following are descriptions of a few entirely preventable accidents which have recently been investigated by the Bureau of Inspection of the Department of Labor and Industry. They are given here as being typical of a tremendous number of accidents which are continually occurring throughout the State and which by reasonable care on the part of the employers and employees can be entirely eliminated.

Fatal Elevator Accident to an Apprentice Boy

The body of an apprentice boy, fourteen years old, was, one morning, discovered at the bottom of the elevator shaft of a factory. He had been sent, the night before, to call the elevator man to bring

the elevator to an upper floor. It is supposed that he raised the gate and leaning into the shaft lost his balance.

This boy should be alive today. It should not be necessary nor possible for any one to raise an elevator safety gate unless the elevator is standing opposite that gate. A simple signal bell removes any necessity for calling to the elevator operator from one floor to another and an equally simple catch on the inside of the gate makes it impossible to raise any gate unless the elevator is at that landing. Both of these devices should be installed on every industrial elevator.

Fatal Elevator Accident in Steel Mill

A man was operating an elevator where there was a hot metal ladle placed on a hydraulic elevator at the mixer platform for the purpose of lowering the ladle to the ground, after the metal had been poured into the mixture. He started the elevator from the controller house on the mixer platform. As the elevator was going to the ground he put his head out of the controller house window. The angle supports on the elevator caught him across the shoulder squeezing him between the angle support on the elevator and the controller house window.

In no case should it be possible for the elevator operator or any one else to get between a moving elevator platform and a part of the building. The window in this controller house should be covered with a wire mesh screen and if it is necessary for the operator to watch the descent of the platform a window should be provided or the controller house should be located so that the observer's body cannot be in the line of the descending platform.

Serious Set Screw Accident

An oiler ascended a ladder to ascertain whether or not a gearing was running properly. His clothing was caught by a projecting set screw. He was thrown round the shaft several times and very seriously injured. The owner of this plant is interested in the safety of his workmen and thought that all projecting set screws had been removed from the shafting. This may, indeed, have been the case at one time and an unthinking repairman may have put in this set screw instead of a safety set screw without the knowledge of the management. Only extreme care to first make a plant safe and then keep it safe can prevent accidents of this kind.

Gear Accident in Textile Mill

The operator of a "finishing card" was severely injured by having her hand caught in the gears. In this case the gears were thought to be guarded by a cage of $\frac{3}{8}$ inch bars. The material was blown

through these rods and was caught in the gears. The operator reached under the guard in order to release the material and her hand was severely injured by the gears. If the Industrial Board regulations had been observed in guarding these gears, this accident could not have occurred. All gears are required to be enclosed at least to the base of the teeth and if possible, completely enclosed. A wire mesh guard surrounding these gears would probably have prevented the material getting into the gears in the first place and would certainly have prevented the operator's hand being caught by them. Even in the absence of an effective guard, no one should attempt to clean or make alterations to any power machinery while it is in motion.

SAFETY FIRST ACHIEVEMENTS IN PLANTS OF THE AMERICAN CAR AND FOUNDRY COMPANY, AT BERWICK AND BLOOMSBURG, PA.*

ACCIDENT SUMMARY.

July 1st to December 31st, 1913.

Monthly average employes on pay roll Berwick and Bloomsburg, 5632.
 Monthly average accident per 1000 employees employed, 52.
 Monthly average accidents involving lost time, 1000 employees, 17.

July 1st to December 31st, 1914.

Monthly average employees on pay roll Berwick & Bloomsburg, 3804.
 Monthly average accidents per 1000 employees employed, 31.
 Monthly average accident involving lost time, 1000 employees, 9.

January 1st to July 1st, 1915.

Monthly average employees on pay roll Berwick & Bloomsburg, 3062.
 Monthly average accidents per 1000 employees employed, 31.
 Monthly average accidents involving lost time, 1000 employees, 6.
 Percentage of decrease in total accidents, 1000 employees, 40.
 Percentage decrease in accidents involving lost time, 1000 employees, 65.

Cold figures seem meaningless to the average man, but stop to think for a minute of what is meant in the homes of workmen in Berwick district of the American Car & Foundry Company, in

*Article reprinted from The Morning Press, Bloomsburg, Pa., December 11, 1915.

which are included both the Berwick and Bloomsburg plants by a 50 per cent. decrease in the number of accidents per thousand men employed in less than three years.

What has done it? Who has done it?

"Safety First," Guelbert and "Safety Billy," the combination of principle and men, the last in the person of W. E. Jarrard, safety inspector of the Berwick district of the American Car & Foundry; these are the means that have made possible this end.

It was some few years ago that officials of the American Car & Foundry Company began to realize the fact that the percentage of accidents was too great, that the workmen were too careless and that even they themselves had not properly safeguarded every danger point. With this realization came as well the realization that every accident interfered with the efficiency of their working force, and, to a certain extent, curtailed output, because accidents caused more or less disorganization. Coupled with that realization was the realization that out of a sense of duty to the fellow man misery could be eliminated by eliminating accidents.

Mr. Jarrard was chosen as safety inspector, and with the work placed in his charge, there was named as well a Berwick plant safety committee which includes W. S. Johnson, general superintendent; Frank Faust, superintendent of car department; L. E. Hess, superintendent of steel car department; J. H. Catterall, superintendent of rolling mill; W. V. Johnson, superintendent of Bloomsburg plant; W. E. Jarrard, safety inspector; M. E. Donovan foreman of repairmen, and C. L. Jarrard, master mechanic.

Once deciding to make "Safety First" the keynote to be sounded in all departments, the company at once assumed its part of the obligation, and it wasn't long before the employees caught an insight of what was going on. They learned, by their own observation, that the company was not crying "Safety First" and exposing the employees to obvious danger not essential to the work.

Thousands of dollars have been expended in the Berwick plant alone in remedying conditions that might contribute to an accident. Machinery was safeguarded wherever possible. Belts, exposed gearings and dangerous points about machinery were all guarded. Not only was the machinery safeguarded, but dangerous zones were investigated; safety gates were erected, and derailleurs placed.

Coincident with the installation of safeguarding machinery, the company, through Safety Inspector Jarrard, began carrying on a campaign of education. Caps were provided for the men, bearing the word "Safety First," as a constant reminder of their duty. Placards were posted and bulletins issued.

"How did the men receive the innovation?" Jarrard was asked.

"The large percentage were ready to meet us half way and were willing to co-operate. That sentiment has been steadily increasing, and the results of the efforts are today apparent in the statistics furnished. We are only too glad to receive any suggestions that will further safeguard the machinery, and many of these suggestions now come from the men themselves. The suggestions are always welcomed, for we realize that only through the co-operation of employer and employee can the greatest beneficial results be secured. Prizes too, were awarded to stimulate the work.

"We soon found a large number of the accidents that occurred were to their eyes, and we have purchased thousands of pairs of goggles, which we provide free for the men that their eyes may be protected. Some of course, don't use them, but the large majority does, and by their use we've eliminated all eye injury. By photographs of one-eyed workmen, the result of avoidable accident, by literature and by word of mouth we've tried to preach the gospel of eye-protection and it has borne fruit.

"We found, too, there was the practice among our men of having fellow employees remove foreign substances from their eyes. That frequently led to infection and sometimes to loss of sight. This practice we have practically eliminated by instructions and literature given each employe.

"Yes, the foreign workman has come to realize the importance of aiding in the protection of his own life and limb, and he is joining just as enthusiastically in the work."

"How is this co-operative idea carried out throughout the plant? Through the foreman of each department, through the gang leaders and by the help of the men themselves. In the building of cars it is necessary to move them from one position to another in the course of construction, and today one member of each gang is delegated to walk ahead of the car and warn everybody of its approach and to see that everything is safe before the car is started. Of course, this is only one of the thousand and one safeguarding methods employed but it emphasizes the point.

"Then, too, we maintain three first aid stations, and employ a competent physician, with free attendance. There is an attendant at each first aid station, and they work in harmony with the physician. By the aid of these, infection is largely eliminated. That, you know, was one of the greatest dangers that had to be fought, for many of the men failed to report their injuries and treated what they thought were slight injuries after their own method, with the result serious infection and long suffering.

"How has the elimination of booze among the employees figured in the reduction of the percentage of accidents?" he was asked.

"Very appreciably. It was not infrequent to have an employee who was injured turned over to the physician with the odor of liquor distinctly noticeable. Now, that never occurs. And no one will deny the fact that the man, who has been drinking intoxicants, is not more susceptible to accident than the man whose brain is clear. There is absolutely no question, that, aside from any moral viewpoint, the restriction of drinking among employees, has worked a big improvement."

PREVENTION IS THE BEST COMPENSATION

Almost every accident occurring in an industrial plant teaches a lesson. Almost every accident resulting in injuries to workers could have been avoided. The management of virtually every great industrial plant is focusing its attention on two words which from the economic standpoint as well as from the human and sentimental side have assumed almost magic significance—"Safety First." Prevention is a single word which carries essentially the same thought. Prevention of industrial accidents and the resultant injuries to workers is the primary aim of the Bureau of Inspection of the Department of Labor and Industry.

"Prevention Is The Best Compensation," is a motto adopted in the Inspection Bureau as an apt warning with the Workmen's Compensation Act becoming effective on the first day of 1916.

Inspectors of the Department of Labor and Industry detailed to investigate accidents which have caused injuries to employes make their reports to the Bureau of Inspection on the following form which not only results in precautionary measures being adopted in a plant where a workman has been injured but also conveys to the inspectors a definite idea of a condition to be watched for in other plants where accidents may occur at almost any time.

Department of Labor and Industry,
Bureau of Inspection,
Harrisburg, Date.....

County....., Date of Accident.....
Establishment
District No., Name of Injured.....
Inspector, ...

Dear Sir:—Kindly investigate above accident and report your findings; state fully extent of injured, and detailed cause of accident. Also, how in your judgment, such an accident could have been pre-

vented? (75% of accident prevention comes from organization and education. Each inspector can do much good by urging the development of an efficient and active Safety Organization in every plant in the State).

Very truly yours,

LEW R. PALMER,
Chief, Bureau of Inspection.

Extent of injury.....

 How did accident happen?.....

 What Safety Organization at this plant?

 How could accident have been prevented?

 What instruction issued to prevent a re-occurrence?.....

 Date invest. Instr. No.....Inspector.....
 Class of Report: Excellent....., Good....., Poor.....

BOY SCOUTS ON THE ALERT FOR BLOCKED FIRE ESCAPES.

Boy Scouts will co-operate with the State Department of Labor and Industry in the interest of safety.

A troop of scouts in Pittsburgh, who read the newspapers, learned that this Department seeks the co-operation of the general public in discovering where fire escapes are blocked in such a manner as to endanger occupants of factories, public halls and tenement houses in case of fire.

This troop of scouts offered their services to Commissioner Jackson in the following letter:

Pittsburgh, Pa., December 17, 1915.

Labor Commissioner John Price Jackson,
Harrisburg, Pennsylvania:

My dear Mr. Jackson:—The Boy Scouts of the Shady Avenue Presbyterian Church of Pittsburgh noticed an article in one of our papers regarding fire escapes. If you will grant the scouts permission, they

will investigate every two weeks, the various fire escapes in the East Liberty district of our City. They will report any building where the fire escapes are blocked or any obstructions on the steps or landings.

Any other suggestions will be welcomed as the scouts are anxious to assist the State Department in any way possible.

Hoping that we may receive a favorable reply, we beg to remain

Yours for Safety,

Shady Avenue Scouts,

(Signed) C. A. HOWARD,

Scout Master.

At the direction of Commissioner Jackson, the following letter was sent to the Boy Scouts by Lew R. Palmer, Chief of the Bureau of Inspection:—

December 23, 1915.

Subject: Boy Scouts and Fire Protection.

Mr. C. A. Howard, Scout Master,
6112 Station Street, Pittsburgh, Pa.:

My dear Mr. Howard:—Your letter of December 17th, addressed to Commissioner Jackson, on the above subject, is at hand, and I can say for him, as well as myself, that we will consider ourselves fortunate in being able to count on the co-operation of the Boy Scouts of the Shady Avenue Presbyterian Church of Pittsburgh.

The field of our Department is so extensive that our comparatively limited force makes it practically impossible to accomplish the work that we have set out to do unless we gain the closest co-operation of all concerned, and I wish to take this opportunity of thanking you on behalf of the Commissioner and the Department for this splendid offer of assistance, which may be the means of preventing serious disasters.

In cities of the first and second class we co-operate with local authorities, and I would suggest that where conditions are found objectionable you take the matter up direct with the proper authorities, but also advise us in order that we double check for safety.

As to further assistance, would say that it would be most desirable to obtain the assistance of the Scouts in checking conditions of exits in motion picture places, it being understood that all exits are to open outward and open freely, thus assuring immediate action in case of necessity. Nothing should be allowed to be placed so as to block the exit, or prevent the opening of exit doors. Exits should be plainly marked with illuminated signs, and lights for said signs should be kept burning during the performance. Standing in the aisles is prohibited, as this causes a blocking of same, which constitutes a violation of the law, copy of which is hereto attached.

The co-operation of the Boy Scouts in connection with the fire drills in schools is of inestimable value, and any assistance that they render in this connection should be counted as a good turn on their credit account.

In school houses the doors should all open outward freely, and any blocking of doors or fire exits should be reported.

Several schools have developed safety patrols or squads of the older boys, who assume the responsibility of assisting the younger children across car tracks and past dangerous places, and I would be very glad to furnish you more detailed information regarding such patrols if you are not already acquainted with their operation.

There is almost an unlimited field of activity for the Boy Scouts when considered from a safety and preventive viewpoint. It has been my pleasure to do some work with Mr. J. H. Nicholson on a committee appointed by the National Safety Council, to draw up a Boy Scout Safety First Plan, which plan has been submitted to the National Council of the Boy Scouts of America, and material has been drawn up for insertion in the Boy Scouts' Handbook and the Scout Masters' Handbook.

I mention this, as I feel that it will indicate to you my particular interest in this matter which I consider of vital importance.

Again assuring you that your letter has been most acceptable to us, and expressing the hope that an active co-operation can be immediately developed, I beg to remain,

Very sincerely yours,

(Signed) LEW R. PALMER,

Chief Bureau of Inspection.

INDUSTRIAL BOARD ADVANCING SAFETY

The Industrial Board of the Department of Labor and Industry, which has adopted fourteen separate safety standards to promote safety in industrial plants, will hereafter, through a committee on safety devices, consider all apparatus for safety submitted to the Department of Labor and Industry for approval.

Material is now being collected and compiled by the Board for additional standards for fire protection and electrical equipment. The boiler code, specifying the standard construction for steam boilers in Pennsylvania, will become effective July 1, 1916. This code will be issued in printed form within the next few months.

The physical standards and qualifications to be applied to children seeking employment certificates under the new child labor law, as published and distributed in a Bulletin issued by the Bureau of Vocational Education of the State Department of Public Instruction, were adopted, by the Industrial Board at the recommendation of a committee of physicians. This committee included Francis D. Patterson, Samuel M. Hamill, Walter S. Cornell and Henry J. Gideon, working under the chairmanship of Dr. John C. Price, former Chief of the Division of Hygiene and Engineering of the Department of Labor and Industry, whose death occurred in October.

In addition to provisions recommended directly by this committee, the Industrial Board adopted a provision intended to prevent the presentation of an employment certificate by a child other than the one to whom issued. The Board also provided that the adopted health standards should not be binding where the Board finds it possible, by reason of the nature of the employment and the condition of the child, to issue a certificate so that the child, even though below the physical standards indicated, may be given specified employment to his own welfare and the welfare of the community.

The Board has ruled, following an investigation, that a glass cutting wheel of solid steel operating at not more than one hundred and thirty revolutions a minute in a wet process does not come under the classification of a grinding wheel as mentioned in the new Child Labor Law.

Considerable attention has been given to the organization of the Bureau of Employment of the Department of Labor and Industry by the Industrial Board. At a recent meeting of the Board, Professor William M. Leiserson, of the Municipal University of Toledo, Ohio, discussed the subject of Public Employment Agencies. Professor Leiserson's knowledge of the conditions to be met in such work was gained from a wide field of experience as Secretary of the American Association of Public Employment Offices. At this session of the Industrial Board Jacob Lightner, Director of the Bureau of Employment and H. H. Wheaton were present.

The Industrial Board met in Washington, D. C., December 28, where the annual conference of the American Association for Labor Legislation was being held at that time.

Copies of the Safety Standards adopted by the Industrial Board may be obtained upon application to the Department of Labor and Industry at Harrisburg. These standards include the following:

Power Transmission, Standard Railings, Stationary Engines, Machine Tools, Forging and Stamping, Polishing and Grinding, Compressed Air, Wood-Working, Bake-Shops, Fire Prevention, Canneries, Boilers, Foundries, Ladders.

FIRST AID IN LUMBERING AND ICE HARVESTING.

Information concerning the dangers to men in lumber camps and to those engaged in the harvesting of ice is especially pertinent at this season of the year. The actual hazards to which they are exposed are probably not any greater than those in many other occupations. The isolation of these industries, however, almost invariably

means delay in receiving medical attention. It is, therefore, of prime importance that the people in charge of such operations should be familiar with a few of the principles necessary to tide over the period between the occurrence of the injury and the handing over of the case to a physician.

Accidents of every degree of severity and of innumerable variety may occur. It is the purpose in this article to call attention to only a few of them however, those in which simple and readily applied treatment may be the means of saving life where the lack of such care may mean death or prolonged illness.

There are many very excellent first aid kits on the market. If the employer does not care to go to the expense of procuring one of these outfits he can for a small sum purchase a few packages of sterile gauze at any drug store. With these to cover an open wound, the other dressings may be improvised. The important thing to remember is that air, water, hands, clothing and in fact everything that has not been sealed and sterilized contain germs of greater or less degree of virulence. It is the unsterilized dressing applied to a wound that frequently causes much more serious consequences than the instrument that produced the wound. By attempting to pick out dirt that has gotten into a wound you do more harm than good. Apply your sterile gauze to the wound and allow the physician to do any cleansing that may be necessary.

Hemorrhage

When you see blood flowing freely after a blow with a sharp instrument, rip or cut the overlying clothing so as to expose the injury. If the blood flows freely in a steady stream, a vein has probably been cut. Apply several thicknesses of sterile gauze directly over the wound but do not allow your fingers or anything else to come in contact with the portion of the gauze to be applied over the raw surface. To do this would render all precautions useless as your fingers might leave germs that would cause blood poisoning. After the gauze has been applied, bind it on tightly with a bandage or if no bandage is available, use handkerchiefs or strips of clothing.

If an artery has been cut, the blood will flow in spurts. Apply and retain the sterile dressing as given above. If the bleeding does not stop with firm pressure on the wound, pressure must be applied just above the wound. Take a handkerchief, suspenders, or anything that can be wrapped around the limb twice and tied. Pressure is made by placing a stick between the two layers of this bandage and twisting it until the bleeding stops. Never allow such pressure to be continued more than an hour, because of injury to the rest of the limb by cutting off the blood supply. At the end of that time untwist the stick carefully and watch for bleeding. If the bleeding

starts, the bandage must be tightened and again loosened at the end of another hour. This procedure should be continued until the patient is left in the hands of a doctor.

Fractures

A simple fracture is the term given to a broken bone not accompanied by a break in the skin. A compound fracture is the name given to a broken bone in which the skin over or near the break is also torn. The latter is the more dangerous. Cover the open wound with sterile gauze and bind it in place. After that is done, both simple and compound fractures are treated in the same way. The chief object is to keep the ends of the broken bone quiet to prevent any more pain than necessary and to prevent the sharp ends of the bone from doing any more damage than they have already done. Splint the limb by binding it to something that is stiff and will support it; straight sticks or tool handles may be used if there is nothing better at hand, but a board slightly wider than the limb is the best thing if it can be obtained. The splint should be long enough to extend beyond the joint on each side of the break. Tie the limb against the splint a short distance above and a short distance below the break, never directly over the break as that is very painful. Then secure the limb more firmly by binding it, as nearly as can be, to the ends of the splint. In the case of a fracture of the thigh or leg, in addition to using the splint, it is well to bandage the two legs together. If in doubt as to whether an injury is or is not a fracture, always treat it as a fracture.

Drowning

Lay the patient face downward with the lower part of his chest resting on a barrel or a log to allow the water to run out of his lungs. Then lay him face down flat on the ground or with a coat folded under his chest so that his head is slightly lower than his body, always turning his face to one side. Kneeling astride the lower portion of his body and with the thumbs near the backbone and the fingers parallel to and near the lower margin of the ribs, sway your body forwards and backwards, at the same time making and releasing pressure on the chest so as to start respiration. Do this at the rate of twelve to sixteen times a minute and keep it up a long time. Persons apparently dead have been resuscitated after several hours of artificial respiration carried on in this way.

Frostbite

If any portion of the body has been frozen, rub thoroughly with ice, snow or cold water. Do not place the patient before a fire or take him into a warm room before his circulation has been restored. You will recognize this by the feeling of warmth and a better color in the skin of the parts affected.

With the exception of the first stages of restoration from freezing, always see that your patient is kept warm with plenty of covers and, if obtainable, bottles filled with hot water placed along his body. Keep him quiet. Keep away curious observers. Allow no one except those absolutely necessary to be near; crowds excite the patient and are in the way of those rendering assistance. Always summon medical assistance at the earliest opportunity.

THE ORGANIZATION OF THE WORKMEN'S COMPENSATION BUREAU IN THE DEPARTMENT OF LABOR AND INDUSTRY

Virtually every Bureau and subdivision of the State Department of Labor and Industry is co-operating in the work of perfecting the organization of the Workmen's Compensation Bureau.

The organization of the Workmen's Compensation Bureau has shown more completely than has before been demonstrated, the complete cohesiveness of the Department of Labor and Industry.

This Bureau, which has the stupendous task of performing the clerical work, made necessary by the Workmen's Compensation Act, is the newest addition to the many activities of the Department.

The first step in the organization of this new Bureau was, in effect, merging the activities of the Bureau of Statistics and Information with the Bureau of Compensation. This was made possible by the action of the Workmen's Compensation Board and the approval of the plan by Governor Brumbaugh.

It has been required by law heretofore, that all accidents occurring in this State be reported to the Bureau of Statistics and Information. This is the foundation of compensation. Instead of having the Bureau of Statistics and Information handle the accidents and the Bureau of Workmen's Compensation also carry reports of accidents, it was considered good business, to make the same report answer the purpose of both organizations.

The Bureau of Statistics and Information is also charged with keeping statistical facts and records of the Department. This will naturally include all statistics concerning compensation.

With these two portions of the work taken care of, it was an easy matter to consolidate other work coming into the Compensation Bureau with that of the Bureau of Statistics.

After January 1st, it will be necessary to make a report of all accidents to the Bureau of Statistics, and the making of this report will answer all the compensation purposes, as far as reporting accidents is concerned.

The new forms of accident blanks have been perfected containing all the data desired by the Compensation Board. One of these new Forms S-O-M is to be used only in reporting mining accidents, the other Form S-O, is to be used in reporting all accidents other than mining.

There will also be co-operation between the Bureau of Inspection and the Workmen's Compensation Bureau. The Inspectors will be at the service of the Compensation Board for such purpose. They will make investigations for referees where special investigations are necessary and they will also, make similar inquiries for the Board itself where cases come before that body.

The Bureau of Inspection is also co-operating very closely with the State Workmen's Insurance Fund, the inspections made by the Bureau of Inspection will be accepted by the Merit Rating Board, and inspections by the Merit Rating Board will be accepted by the Bureau of Inspection.

The Merit Rating Board, is an organization, which has to do with the rates to be charged for insurance. Where it is found that a plant has complied with all safety standards, the premium will be lower than the fixed rate.

It is in determining the extent for safety equipment that the Merit Rating Board and Inspection Bureau will co-operate.

The physicians and trained engineers of the Division of Hygiene have also been placed at the disposal of the Compensation Board and its members will act as experts and investigators for the Compensation Board whenever their services are required.

Safety Standards that have been compiled by the Industrial Board for various types of industries and for power transmission and other equipment common to almost all industries will be sent to employers to indicate how they may make additional safeguards in their factories.

The Bureau of Employment, created in the Department of Labor and Industry October 1, will make special effort to aid men partially disabled by injury to secure employment for which they are adapted in spite of their physical disabilities. As the amount of compensation to be paid to partially disabled employes depends upon the difference in wages they could earn before and after the accident, this activity of the Employment Bureau will be of direct benefit to employers in all sections of the State.

BUREAU OF WORKMEN'S COMPENSATION RULINGS OF THE WORKMEN'S COMPENSATION BOARD

The Workmen's Compensation Board has adopted the following rulings:

"The Board rules that the term 'domestic service' applies only to service in a private home and does not apply to service in a hotel, hospital or other institution."

"Those engaged in the business of fruit growing, poultry raising and horticulture, as a business and not merely incidental to general farming come under the Compensation Act and are not exempted by Act 343 of June 3, 1915, which is a supplement to the general Compensation Act."

"It is contrary both to the letter and the spirit of the Workmen's Compensation Act of 1915 for an employer to levy contributions upon his employes, by reducing their wages or otherwise, for the purpose of meeting his liability under the Act."

Chairman Mackey has made, on behalf of the Board, the following statement regarding the final ruling.

"Our Board, up to the present time, has been extremely gratified by the spirit of thorough co-operation shown by the employers of the State toward the Compensation Law. In a very few instances rumors have reached us that some employers were preparing to meet the expense of carrying insurance, or the anticipated cost of compensation, by an enforced contribution from their employes which, of course, amounts to nothing more or less than a reduction of wages to the extent of the contributions. An employer who does this not only violates the spirit and the letter of the law, but invites labor disturbances in his establishment.

"The great benefit of compensation is the fact that the cost of injuries or deaths incident to the prosecution of industries is charged to the employer, so that ultimately that cost can be so equally shifted to the consumer that no one will feel the burden. This result could never be reached if the employee were compelled to bear the cost of his own insurance.

"We are perfectly satisfied that only a very few would undertake to adopt this method of treating this subject. We have adopted this rule as a warning to that very small minority, and trust that our Board will not be called upon to handle the question in any other way. If necessary we will undertake to protect the wage earner from this imposition by very drastic measures."

RULES OF PROCEDURE OF THE BUREAU OF WORKMEN'S COMPENSATION

The following rules and instructions for the execution of compensation agreements have been adopted by the Workmen's Compensation Board.

1. Agreements for Disability

No agreement is necessary unless the disability resulting from the accident lasts more than fourteen days or the employer has failed to provide the surgical, medical and hospital services as required by Section 306(e) and has thus compelled the injured employe to obtain them at his own expense.

In computing the time when the disability becomes compensable, the day upon which the accident occurs is to be considered one of the fourteen days. Thus, if an accident occurs at any hour on Monday, January 3d, 1916, the right to compensation begins on Monday, January 17th, 1916.

Compensation Agreements, as provided in Section 411, must be executed whenever the disability continues for more than fourteen days. No receipt for compensation from an employe will be approved as a discharge of the liability created by Article III, unless such agreement has been mailed or delivered to the Board and approved by it.

When after the first fourteen days of disability, there appears a reasonable prospect that the disability will terminate within a further period of fourteen days, no agreement need be executed until the disability has terminated or the further period of fourteen days has expired. An agreement showing that the disability has terminated together with the receipt (substantially as in form 51), showing that the agreed compensation has been paid, will close the case, subject however to its being reopened by a new agreement or award, if at some later time an unexpected return of disability should result from the injury.

When the accident has caused the loss of a hand, foot, arm, leg, or eye or the use thereof, an agreement should be made immediately after the expiration of the first fourteen days for the payment of compensation for the number of weeks, appropriate to the particular dismemberment under Section 306(c).

When the disability is one of uncertain duration, an agreement should be made not more than four weeks after the disability begins. This agreement must fix the compensation to be paid for disability up to the date thereof. The future compensation may be provided for in one of three ways:

- First: A new agreement may be made at intervals of not more than one month, agreeing upon the compensation which has accrued during that time.
- Second: The agreement may provide for the payment of compensation for a further definite period during which it is estimated that such disability is certain to continue.
- Third: It may provide that compensation shall be paid during the full 500 weeks when the disability is total, or 300 weeks when it is partial, or "so long as the disability continues unchanged," or "until the disability shall cease or change in extent".

While the first two methods may be used with advantage when there is a reasonable prospect of a speedy recovery of earning power, they are inappropriate if the disability appears likely to last any considerable time, since they could require the constant execution of supplemental agreements. In such case, the third method is strongly recommended. When an agreement has been executed or an award made providing for or ordering the payment of compensation "so long as the disability continues unchanged", a supplemental agreement (substantially as provided in form 14 (a)) terminating or modifying the agreement or award, if the employe dies, returns to work, or where, in any other way, his disability is terminated, diminished or increased.

If the employe or his dependents, in case of death, refuse to execute such an agreement when his disability has diminished or ceased or if the employer should refuse to do so when the employe's disability has increased, a petition can be presented to the Board under Section 426 (substantially as provided in form 36) praying it to order the agreement or award modified or terminated. And the filing of such a petition will suspend, until the petition be granted or refused, the payment of compensation to such extent as the facts alleged therein would, if proved, require.

If any employe, entitled to compensation for disability under an agreement or award, dies as a result of his injury an agreement (substantially as provided in form 15) should be immediately made with the dependent, dependents, or personal representative of such employe. Such an agreement, stating as it must the date of the employe's death, will of its own force and without any further agreement terminate the disability agreement as of the date of such death.

II. Agreements for Death Compensation

When the accident causes death, without any intervening period during which disability compensation is payable to the employe killed, an agreement (substantially as provided in form 15) should be executed between the employer and the dependent, dependents or personal representative.

In many cases the amount of the death compensation will not vary during the period in which it is payable, unless one or more of the dependents die or remarry.

Thus, if the deceased employe leaves only a widow, or a widow and children, all under ten years of age, she will be entitled to the same percentage of her husband's wages from the beginning to the end of the three hundred weeks during which death compensation is payable, unless she remarry or she, or one or more of her children die.

On the other hand, there will be many cases when the percentage of wages payable as death compensation is certain to diminish from time to time, as children attain the age of 16. Thus, if a widow be left with four children, aged respectively 11, 12½, 14 and 15½ years, she will be entitled to 60% of her deceased husband's wages for the first six months, to 55% for the next eighteen months, to 50% for the next eighteen months, to 45% for the next eighteen months and finally to only 40% for the last forty weeks of the full compensation period of three hundred weeks. The last paragraph of the Compensation Agreement for Death prepared by the Board (form 15) is designed for use in such a case. By using it the varying compensation, payable under these changing conditions, can be agreed upon in one agreement, so saving the annoyance and inconvenience of making a new agreement every time a child, brother or sister reaches the age of sixteen.

When, after an agreement has been executed or award made for death compensation, a widow remarries or a child, brother or sister dies, thus unexpectedly changing the amount of compensation or the person to whom it is to be paid, a supplemental agreement (substantially as provided in form 15 (a) should be executed.

If the widow upon remarriage, the personal representative of a deceased person who was the only dependent or the remaining dependents, where there were several dependents, shall refuse to execute such a supplemental agreement as the facts require, a petition can be presented to the Board under Section 426 (substantially as provided in form 36) praying it to modify or terminate the Compensation Agreement or Award. And the filing of such a petition will, until the petition be granted or refused, suspend the payment of compensation to such an extent as the facts alleged therein would if proved, require.

Petitions and Answers

All Claim Petitions and other petitions which allege facts as the ground for the relief prayed for by them and all answers to petition must, be subscribed and sworn to or affirmed before a Compensation Referee or a Notary Public or other person authorized to administer oaths.

When a petition to the Board alleges facts, as the ground for the relief prayed for therein, the adverse party must file an answer (substantially in accordance with forms 37-38) and any fact alleged in the petition which is not denied by the answer, will be deemed to be admitted.

Referees will administer oaths free of charge and shall assist all parties in drawing claim petitions, answers and all other papers necessary for the administration of the Workmen's Compensation Act when requested so to do.

Rules of Procedure

If the facts agreed upon in a Compensation Agreement differ materially from the facts stated in the Report of the Accident and the reports supplemental thereto made to the Department of Labor and Industry, the Agreement will not be approved until the discrepancy is explained to the satisfaction of the Board.

All Agreements, Claim and other Petitions and Answers must be substantially in accordance with the forms prepared by the Board. These forms can be obtained by application to the Workmen's Compensation Bureau, Harrisburg, Pa.

Any Claim Petition which does not contain the information required by Forms 18 and 19, will not be assigned to a Referee for hearing but will be returned to the claimant with a request that he shall supply the information not given.

References of Questions of Fact Arising Out of Petitions

When the answer to a petition to the Board denies the fact or facts alleged in the petition or alleges additional facts not stated in the petition, the Board may refer such fact or facts to the Referee or Referees of the district or districts in which such fact or facts can be most conveniently investigated.

In such case the Referee to whom the question is referred shall fix a time and place of hearing, and shall give notice thereof to all parties in interest.

Where the question of fact arises under a petition and answer as to a change in the disability of an employe or the status of a dependent, it will be referred to the Referee of that district in which the employe or dependent resides or resided.

When a claim petition has been referred to a Referee and the only fact denied in the answer is one which can be more conveniently investigated in another district, the petition may be transferred through the Bureau to the Referee of such other district.

When one of the allegations denied in an answer to a claim petition is the disability of an employe or the status of a dependent, this question may be referred through the Bureau by the Referee to whom the petition is assigned to the Referee of any district in which the question can be more conveniently investigated, whose finding thereon when made to the original Referee shall be of the same effect as a finding of the original Referee.

Proceedings Before Referees

(Duties of a Referee before a Hearing.)

When a claim petition is referred to a Referee, he should endeavor to bring the parties to an understanding and to induce them to settle the claim, without further litigation, by an appropriate Compensation Agreement.

Wherever the facts stated in a Claim Petition differ materially from those stated in the Report of the Accident and the reports supplemental thereto made to the Department of Labor and Industry, the Referee shall make an investigation in person or by an inspector of the Department of Labor and Industry.

The Referee shall make an investigation in person or by an inspector of the Department of Labor and Industry whenever he is of the opinion that such investigation will be of material assistance in determining the matter of fact put in issue by any petition and answer.

Whenever the evidence at a hearing is conflicting or insufficient, the Referee may continue the hearing and make an investigation in person or by an inspector of the Department of Labor and Industry.

Where any medical fact is put in issue by a petition and answer, the Referee shall apply to the Board, as provided in Section 417 for power to appoint an impartial physician or physicians to examine the physical condition of the petitioner or defendant to the petition, and report thereon.

Hearings

The Referee shall hold each hearing at the place, within his district, most convenient to all parties concerned.

All hearing before the Board or a Referee shall be open to the public.

The object of all hearings is to ascertain the truth of the matter in dispute. The Referee shall see to it that the testimony is fully presented and to that end may examine and cross examine witnesses.

The Referees shall require that both parties and counsel shall treat all witnesses fairly and courteously.

When either claimant or defendant is not represented by counsel, the Referee shall advise him as to his rights, aid him in examining witnesses and give him all assistance which is compatible with the judicial position of the Referee.

Burden of Proof

The party who alleges in his petition or answer any fact, not admitted by the pleadings and not ascertained by an investigation made or ordered by the Referee, must produce evidence to prove it.

The burden rests upon the claimant or petitioner to establish by a preponderance of probability upon all the facts proved by the evidence or ascertained by the Referees' investigations, his right to compensation and its amount or his right to such other relief as his petition prays for.

Evidence

The statement of any person, having personal knowledge of any material fact, who is dead or whose testimony before a Referee or by deposition can not be conveniently obtained, may be received in evidence if the circumstances under which it was made are such as to convince the Referee that it is trustworthy.

Any conduct or act which shows a fixed habit or reasonably constant tendency on the part of any person to act or not to act in a particular way, shall be admitted in evidence to prove that such an act was or was not done by such person on the occasion in question.

No physician's certificate shall be as evidence of any controverted medical fact, unless such physician be dead or otherwise unable to testify before any Referee or to make a deposition.

If a witness resides in a district other than that to which the Claim Petition is assigned or the question of fact referred, the Referee may order his or her testimony to be taken before the Referee of the district in which the witness resides.

No deposition shall be received, except by express agreement of the parties, unless the witness resides outside the Commonwealth or it is shown that by reason of illness or other cause the witness can not give his or her testimony before the Referee of any District of this Commonwealth.

If the Referee has made a personal investigation, he shall state at the hearing any facts observed by him upon which he intends to rely and he shall, if requested by either party, grant a continuance to enable such party to produce evidence to challenge the accuracy of his observation.

If a Referee intends to rely upon any statement made to him during a personal investigation, he shall state at the hearing the substance of the statement and the name of his informant and shall offer to continue the hearing in order that his informant may, if either party so request, be produced as a witness for examination and cross examination. The failure to request such continuance shall be a waiver of all right to the production, examination and cross examination of such informant.

Whenever the Referee intends to rely upon the report of any physician, or of any inspector of the Department of Labor and Industry, or any other expert, appointed or employed by him under Section 417, he shall, whenever possible, offer to the parties an opportunity to read such report or, if this be impossible, shall notify them that he intends to rely on the report of such physician or expert giving the name of the physician or expert and the matter entrusted to him for investigation and notifying the parties that he will admit such report in evidence without requiring the physician or expert to attend in Court, unless one or both of the parties shall make a request in writing that such physician or expert be produced at the hearing for examination or cross examination. The failure to request the production of such physician or expert shall be a waiver of any right of examination and cross examination.

Appeals and Petitions for the Termination or Modification of Agreements and Awards

An appeal taken by an employer who has complied with Section 305 or by the State Workmen's Insurance Fund will operate as a supersedeas and will suspend the payments ordered by the award appealed from, in whole or in such part as the appeal, if sustained, would require. An appeal by an employer who has not complied with Section 305 will not operate as a supersedeas unless such employer shall file a satisfactory bond in an amount sufficient to secure the payment of the compensation due under the award at the date of the appeal and the compensation which may accrue during the pendency of the appeal.

The filing of a petition to terminate or modify a Compensation Agreement or Award, as provided in Section 426 shall operate as a supersedeas and will suspend the payment of compensation fixed in the agreement or by the award, in whole or in such part as the facts alleged in the petition would, if proved, require.

BUREAU OF EMPLOYMENT FINDS WORK FOR UNEMPLOYED

The recently created Bureau of Employment of the Department of Labor and Industry distributed 620 jobs in Pennsylvania industries as Christmas presents among unemployed workers during the month preceding Christmas.

The central office of the Bureau at Harrisburg placed 228 workers in employment. The Philadelphia branch office at 1519 Arch Street placed 338 workers in positions. Fifty-four jobs were obtained for unemployed through the Johnstown branch office in the Hannan Building in that city.

Approximately 1,834 applications for employment were received at the three offices of the Employment Bureau during the six weeks preceding January 1. At the Harrisburg office 258 applications for work were received; at Philadelphia, 1,372; at Johnstown, 204. There were 1,214 applications for work in the three offices of the Bureau, including 30 at Harrisburg, 1,034 at Philadelphia and 150 at Johnstown on January 1.

The Bureau had, at that time, 386 positions in various lines of work to offer unemployed persons. There were 170 of such vacancies in the Harrisburg office, 114 in the Philadelphia office and 102 in the Johnstown office. A great number of applicants on the waiting list are persons who are capable of performing only very light work and for whom it is difficult to obtain positions.

Director Jacob Lightner of the Employment Bureau asserts that every effort is being made to find places suitable for every applicant, but he declares that in many instances the problem presented is difficult to solve.

"A pleasing feature of the work is the genuine gratitude shown by many of the persons whom we have aided in finding employment," said Director Lightner. "It frequently happens that applicants offer a dollar as advance fee to the clerk who receives the application. Considerable surprise follows when the money is refused and the fact is impressed upon the applicant that the State is aiding them without cost to obtain employment.

"Many employers have similarly voiced their appreciation of the service performed by the State Employment Bureau. With the development of this free system to bring together the unemployed worker and the employer in need of employees, the aim of the Bureau will be to perform a beneficial and economic service to all of Pennsylvania."

The following letter has been sent to employers in the district served by the central offices of the Employment Bureau at Harrisburg. This letter solicits the cooperation of employers as follows:—

Gentlemen:

The Bureau of Employment of the State Department of Labor and Industry is open for business in Room 6, Masonic Building, corner of Third and State Streets, with entrance in the rear of the building on Willis Street.

We are able to supply capable help, skilled and unskilled, quickly and satisfactorily, without charge to you or to the applicant. Among our list of selected applicants in the various occupations we have a number whose recommendations and working records are of the highest character. It would probably seem strange to you that we could have on our waiting list such a fine class of workmen. This, however, is due to the fact that most of them are endeavoring to better their conditions.

Among the applicants are:—watchmen, janitors, clerks, expert accountants, foremen, managers, engineers, firemen, bench hands, plumbers, steamfitters, waiters, chefs, packers, salesmen, chauffeurs, bookkeepers, stenographers, general clerks and a few laborers.

Efficiency first, sums up our service. We investigate business references and training, where skill is necessary and finally select the right man for the job. This is a great saving of detail on your part.

A request from you by telephone, mail or in person, will receive prompt and courteous attention between the hours of 9 A. M. and 5 P. M. except Saturdays when the office closes at noon.

Trusting I may have your cooperation, I am,

Yours very truly,

(Signed) JACOB LIGHTNER,

Director Employment Bureau.

CONDENSED INFORMATION ON LABOR LAWS

The following abstract of Labor Laws effective January 1, 1916, has been prepared by the Department of Labor and Industry for distribution among employers of the State. Copies of this abstract, in poster form, may be obtained by application to the Department of Labor and Industry at Harrisburg.

Form I 25A.

To be posted conspicuously in each employment room.

ABSTRACT OF LAWS GOVERNING EMPLOYMENT OF WOMEN AND MINORS.

Issued by the Pennsylvania Department of Labor and Industry.

January 1st, 1916.

FEMALES.

Hours of Labor.

Females may not be employed more than ten hours in any one day nor more than fifty-four hours in any one week: nor may they be employed more than six days consecutively, except as follows:

Females in fruit and vegetable canneries and nurses in hospitals, are exempt from the above provision.

Overtime may be allowed on three days in the *same* week under the following conditions: Provided such overtime does not exceed two hours in any one day and the hours for the week do not exceed fifty-four:

(a) In case of a legal holiday.

(b) In case of the loss of more than thirty minutes due to alterations or damage to machinery.

Females under twenty-one may not be employed between 9 P. M. and 6 A. M., except telephone operators over eighteen years of age and nurses in hospitals.

No female may be employed in any manufacturing establishment between 10 P. M. and 6 A. M., except as manager, superintendent, clerk or stenographer, but such employes may not exceed the hours of labor set forth above.

Females shall be allowed not less than forty-five minutes for the mid-day meal, except that if a female is employed less than eight hours per day this period may be reduced to thirty minutes.

Females may not be required to work more than six hours continuously without an interval of forty-five minutes between work periods, except that if a female is employed less than eight hours per day such interval may be reduced to thirty minutes; provided permit be first obtained from the Department of Labor and Industry. Female employes shall not be required to remain in the work rooms during meal times and rest periods.

In each work room notice must be posted of the hours of work required for each day of the week for such class of workers employed; also printed abstract of the factory laws, which will be furnished free on application to Department of Labor and Industry.

Employer of females shall also post conspicuously in at least one of the rooms where every such female is employed, a schedule of the hours of labor of every female, containing her name, daily and weekly hours and time of commencing and stopping work and meal hours; also a printed abstract of the woman's employment law. If employment is in connection with, but not in such establishment, the abstract and schedule shall be posted in the office of such establishment. The hours so posted shall not be exceeded. The abstract and form of schedule will be furnished free on application to the Department of Labor and Industry.

Health Provisions.

Exhaust fans of sufficient power or similar devices shall be provided to carry off poisonous fumes, gases and dust. Employers in establishments where any poisonous substances are present shall require the use of a separate lunch room free from such injurious substances.

Employers of women shall make reasonable effort to supply clean and pure drinking water to be kept properly covered, and no money shall be collected by employer from employes for ice water furnished.

In every establishment where both males and females are employed, separate water closets, wash and dressing rooms shall be provided. Water closets for females shall be provided in the ratio of one to every twenty-five females employed. Such closets shall be properly lighted, and separated from work rooms by partitions extending from floor to ceiling. Each compartment shall have sufficient direct outside ventilation. Entrances shall be screened from the work room and from entrance to water closets provided for males by screens or partitions at least six feet high. All water closets shall be kept clean and sanitary and free from obscene writing or marking.

Suitable seats shall be provided for all women employes and use thereof permitted when they are not necessarily engaged in active duties. At least one seat shall be provided for every three females; all seats must be conveniently accessible to workers.

Monthly fire drills are required in factories where women or girls are employed, in which drills all employes must take part.

Penalties.

Violation of any of the foregoing provisions is a misdemeanor, punishable by fine or imprisonment or both.

MINORS.

A minor is any person under 21 years of age.

Age.

Minors under 14 may not be employed in any establishment or in any occupation.

Minors under 16 may not be employed in dangerous occupations, specified in Section 5 of Act No. 177, approved May 13, 1915.

Minors under 18 may not be employed in hazardous occupations specified in the same section.

No minors may be employed in any saloon or bar-room where alcoholic liquors are sold.

Hours.

No minor under 16 may be employed for more than 51 hours a week, or more than 9 hours a day, or before 6 o'clock in the morning or after 8 o'clock in the evening.

No minor may work as a messenger for a telephone, telegraph, or messenger company in the distribution, collection, transmission, or delivery of goods or messages, before 6 o'clock in the morning, or after 8 o'clock in the evening.

Schools.

Every minor between 14 and 16 years of age, must attend for the equivalent of not less than 8 hours each week, a continuation school in the district where said minor is employed.

The school hours shall not be on Saturday or Sunday, or before 8 o'clock in the morning or after 5 o'clock in the evening of any other day.

Newsboy and Street Trades.

No boy under 12, and no girl under 21, may sell any newspaper, magazine or other publication or any article of merchandise in any street or public place.

No boy under 14, and no girl under 21, may be employed as a scavenger, boot-black, or in any other trade or occupation performed in any street or public place.

No boy under 16, and no girl under 21, may work at selling papers or in the street trades before 6 o'clock in the morning or after 8 o'clock in the evening.

Employment Certificates.

Minors between 14 and 16 may not be employed without employment certificate, which certificates must be kept on file in the establishment where they are employed.

General employment certificates are required where children under 16 are employed all the time.

Vacation employment certificates are required where children under 16 work at any time except that time when they are required to attend school.

Employment certificates may be issued only by the District Superintendent, Supervising Principal, or Secretary of the Board of School Directors or their Deputies, in the district in which the minor resides.

No minor under 16, who has not passed the 6th grade in the public schools, is entitled to an employment certificate.

Before an employment certificate is issued, the prospective employer or some one authorized by him, must make a statement in writing that he expects to give the minor applying for the certificate, employment.

Employers must acknowledge in writing to the issuing officer, the receipt of an employment certificate, within 3 days after the beginning of employment.

Upon termination of employment the employer must return the certificate by mail to the issuing officer.

Lists and Penalties.

Every employer of minors under 16 years of age, must post and keep posted in a conspicuous place in every establishment where such minors are employed, this notice of the hours of labor and lists of all minors employed under 16 years of age.

Any person, or agent, or manager, who shall violate any of the provisions of the Child Labor Act, shall, upon conviction, be sentenced to pay a fine of not less than \$10, or more than \$200, or to undergo an imprisonment of 10 days or both.

JOHN PRICE JACKSON,
Commissioner.

HIGH TOLL OF INDUSTRIAL ACCIDENTS DURING NOVEMBER, 1915

More accidents were reported to the Bureau of Statistics and Information of the Department of Labor and Industry from 20,571 Pennsylvania industries during the month of November than in any preceding month of 1915.

There were 6,098 persons injured in November. Ninety-eight died from their injuries and 606 were disabled for more than thirty days. One woman was seriously injured in a textile plant and 19 women suffered minor injuries while working in various industrial plants.

The toll of industrial accidents for November exceeds the September record, the next highest, by 405 injuries. In September only 54 men died as a result of their injuries.

More men were injured in metal plants in November than in any other branch of industry. Of a total of 2,464 persons injured in metal plants 21 died and 207 were disabled for more than thirty days. Injuries received in mines run higher in fatalities and length of disability. Of 1,536 persons injured in mining work 58 died and 240 were disabled for more than thirty days.

Monday was the day of the week when most injuries were received during November. The record of November accidents by days of the week is: Monday, 1,149; Tuesday, 969; Wednesday, 537; Thursday, 954; Friday, 879; Saturday, 754; Sunday, 856.

During the first eleven months of 1915 reports of 49,998 injuries sustained by workers were received at the Bureau of Statistics and Information. Of that number 935 died as a result of their injuries and 3,834 were disabled for more than thirty days.

REPORT OF ACCIDENTS IN PENNSYLVANIA INDUSTRIES DURING NOVEMBER, 1915.

	Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Male.			Female.			Total.
								Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.	
Nursery, .....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Engineering, .....	.....	10	6	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	37
Building trades, .....	.....	16	16	23	17	31	11	5	3	107	.....	.....	.....	114
Chemicals, .....	.....	9	8	8	19	17	9	4	5	61	.....	.....	.....	70
Clay--Glass, .....	.....	.....	1	1	1	2	.....	.....	.....	3	.....	.....	2	5
Clothing, .....	.....	.....	1	1	1	4	9	.....	4	24	.....	.....	3	31
Food, .....	.....	2	1	9	5	4	1	1	3	13	.....	.....	.....	17
Leather, .....	.....	1	2	4	4	4	1	.....	1	2	.....	.....	.....	3
Liquors, .....	.....	1	.....	1	.....	4	.....	2	3	32	.....	.....	.....	37
Lumber, .....	.....	14	3	5	5	4	.....	.....	3	38	.....	.....	.....	3
Paper, ...	3	7	13	1	6	9	1	.....	1	.....	.....	.....	.....	39
Printing, .....	.....	15	7	1	.....	.....	.....	.....	.....	3	.....	.....	.....	4
Textiles, .....	.....	1	1	1	1	2	1	.....	.....	34	.....	1	.....	43
Miscellaneous, ...	8	13	11	11	14	10	12	3	17	64	.....	.....	.....	84
Laundries, .....	.....	450	390	190	401	.....	.....	.....	.....	.....	.....	.....	.....	.....
Metals, ...	370	291	265	123	220	198	331	21	207	2,233	.....	.....	3	2,464
Mines, ...	291	250	245	150	247	213	149	58	240	1,238	.....	.....	.....	1,536
Public service, ...	232	314	.....	.....	1	.....	210	3	114	1,491	.....	.....	3	1,611
Tobacco, ...							1			2				2
Unclassified, ...														
Total, ...	856	1,149	969	537	954	879	754	98	606	5,374		1	19	6,098



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MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



A BULLETIN OF INFORMATION FOR THE PUBLIC

FEBRUARY, 1916

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SAFETY Eventually WHY NOT NOW?

AN ATTRACTIVE "SAFETY FIRST" PLACARD OF BORROWED DESIGN.

DEPARTMENT OF LABOR AND INDUSTRY

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THE HAZARDS TO HEALTH FROM INDUSTRIAL DUST.

That the dust generated in the various mechanical processes associated with the manufacture of articles in common use in daily life is a causative factor in the production of a vast amount of ill health and premature death among workmen, has been clearly set forth by writers on occupational diseases from the earliest times.

We all know from experience that the composition of the atmosphere directly affects public health; therefore the purity of the air breathed, especially in factories and workshops is a condition worthy of serious consideration, both from a sanitary and an economic standpoint.

The atmosphere of factories and workshops becomes laden with dust of various kinds from the numerous indispensable industries, which minister to human needs, and these dusts in turn may be the bearers of bacterial invaders.

Aside however from the danger of transmission of the so-called air borne diseases through dust contaminated air, any atmosphere polluted by dust is a serious menace to health and life. This has been verified by researches into the Dusty Trades and by statistical evidence.

Dust in any form whatever is injurious to health when breathed continuously and in considerable quantities, because it not only possesses certain irritating properties by virtue of its physical structure, which mechanically injure the delicate membrane of the respiratory passages and lungs, but also because of its chemical nature, dust may act as a definite poison to the human system and produce a general disease. In addition thereto, dust is often the agency through which disease producing germs gain entrance to the body.

Sir James Crichton Browne emphasized the importance of dust as a factor in industrial diseases in his address on the Dust Problem, read at the Sanitary Congress held in Manchester, England, in 1902, from which the following quotation is made:

"The mortality of the principal dust-producing occupations, compared with that of agriculturists, who live and work in what is practically a dustless atmosphere, is excessive to a startling degree. It is not suggested that this excess is to be ascribed to dust alone, no doubt various factors contribute to it, but the facts that it is due mainly to respiratory diseases, that it is distributed amongst the several occupations pretty much in proportion to their dustiness,

and that it has diminished in some instances where dust has been effectually dealt with, justify the conclusion that it is largely dust begotten."

The essayist further pointed out the fact that the ill health among the workmen in each of the 22 dusty trades investigated, was directly due to the dust inhaled by the workmen and that the death rate bore a well defined relation to the quantity and quality of dust present in the air. He further stated that the manner in which the different kinds of dust act upon the human organism does not differ materially, except when the dust in addition to being mechanically injurious, possesses a poisonous character which causes a definite disease, as lead or phosphorus poisoning. He believes that mineral dust acts with greater rapidity upon the lungs than organic dust, which is slower and more insidious in its action, but generally follows similar lines.

All those fine solid particles, which are thrown off from various animal, vegetable or mineral substances, in the process of manufacture of numerous articles, which have a wide range of usefulness in daily life, may be included under the term "Industrial Dust."

Such dust varies in quality in the different industries and in its power to inflict injury in the human being. Dust may be divided, according to physical properties into the following groups:

"1. Cutting dusts, made of minute hard crystallized particles which have sharp, cutting and pointed edges. These dusts are composed of iron or steel, of stone, of sand or glass, of dried silicates in earthenware, of lime and pearl.

"2. Irritant dusts, derived from woods, ivory, textile fabrics, fluffs of wool, silk, cotton, flax, hemp, hair and clay.

"3. Inorganic poisonous dusts, derived from poisonous chemical compounds used for coloring artistic products, or for preserving organic substances, such as furs. These dusts are charged with arsenical salts.

"4. Soluble saline dusts, derived from soluble crystalline substances used for dyeing purposes. Sulphate of iron yields a dust of this class.

"5. Organic poisonous dusts, thrown off during the making up of tobacco into cigars and snuff.

"6. Obstructive and irritating dusts composed of carbon, of fine particles of coal dust, of scrapings of carbon or of soot, dust of rouge and of flour."

From *Unhealthy Trades* by Dr. B. W. Richardson in *Scientific American* 1876.

It matters but little to what particular kind of dust the worker may be exposed; the real source of danger lies in the fact that the dusty particles are carried by the air into the lungs. They pass, floating in the air, through the nostrils and mouth to the larger bronchial tubes, thence into the smaller tubes and finally into the air vesicles.

Usually the immediate and first result of breathing dust laden air is catarrh of the respiratory organs.

Continued exposure by the workmen to the inhalation of a considerable quantity of dusty particles that are insoluble or cannot be removed by the tissue secretions, produces chronic diseases of the lungs, especially fibroid phthisis. This disease runs a slow, insidious and progressive course, and is specific to many dusty trades, especially grinders, stonecutters and potters. Moreover a lung thus impaired falls an easy prey to invasion by the tubercle bacilli, from which arises tuberculous phthisis. In many cases localized deposits of dust are distributed through the lungs.

The term "pneumoconiosis" is applied to such a condition, and is modified according to the various kinds of dust inhaled, as anthracosis from coal dust, siderosis from metallic dust, silicosis from stone dust and byssinosis from vegetable fiber dust. These are commonly known as the asthmas or the consumptions of the trades referred to.

Dust may exert its deleterious effects through channels other than that of the respiratory passages. Frequently, dust gains access to the system through injury to the skin, and, if laden with disease germs, it causes general disease, as glanders, rag pickers' disease, etc. Again, dust which is of a poisonous nature, may be swallowed and induce gastro-intestinal diseases. The eyes, also may be more or less exposed to the influence of dust, from which results severe inflammation.

Within the last decade, considerable attention has been given to the study of industrial diseases by individual investigators, industrial insurance companies, Federal and State Commissions, and philanthropic institutions. As a result of these investigations into a heretofore neglected field of preventive medicine, much information concerning the hazardous conditions in certain industries has been collected together and classified, from which have been formulated practical preventive measures, and the application of these measures to existing industrial evils has resulted in the establishment of efficient means of control.

A comprehensive survey of occupational diseases was made by a British Departmental Committee on Compensation for Industrial Diseases. Their report, issued in 1906, contains much valuable in-

formation. Their observations on the relationship of respiratory diseases to exposure from industrial dust is especially noteworthy, and is here quoted:

"Pulmonary disease manifests itself in three kinds or forms—as ordinary tuberculous phthisis, acute or chronic; as 'fibroid phthisis,' and as a mixed form when a tuberculous process is ingrafted sooner or later upon the fibroid. Fibroid phthisis is always a slow disease. It consists in a chronic reactive inflammation around the many minute foci of dust inhalation, which by coalescence gradually invades large areas, impairing and strangulating the proper lung tissues in corresponding measure. Again, a lung so impaired is very apt to harbor bacilli, especially the bacillus of tubercle, by the influence of which it may be still further destroyed. Thus both fibroid phthisis uncomplicated and fibroid phthisis with the supervention of tubercle are in their nature occupational disease. * * * * *

* * * The first symptom is a cough which insidiously, and for a while almost imperceptibly, becomes habitual. At first in the morning only, it gradually becomes more frequent during the day, and expectoration, nominal at the beginning, becomes more marked, though not profuse until the latter stages of the disease. Leaving out of account the more rapid progress of the disease in tin and gold miners, these symptoms of a negative phase of purely local damage may last for years—ten or fifteen or even more—without advancing to such a degree as to throw the workman out of employment or even to cause him serious inconvenience. At some period, however, rarely less than ten years and frequently more than twenty, of continuous employment, in a like imperceptible manner the breathing gets shorter and the patient finds himself less and less capable of exertion. Yet, even when the cough and the dyspnoea (shortness of breath) have reached a considerable degree, there are no signs of fever, as is the case in pulmonary tuberculosis; the flesh does not fall and the muscles retain their strength and volume.

"Thus even at a period when the malady is fully established, the general health may be but little impaired, and the patient may not be compelled to cease work. Herein fibroid phthisis presents a well marked difference from pulmonary tuberculosis; and even if, as we have said, the disease becomes complicated with tubercle, yet the rate of progress may be determined rather by the character of the primary than of the secondary disease, though usually the supervention of tubercle hastens the sufferer into a more rapid consumption."

We may conclude, then, that fibroid phthisis is a disease specific to employment in certain dusty trades, that the deleterious effects of dust upon the human organism are well marked and indisputable.

Therefore the first essential in sanitary reform is the adoption of efficient measures and methods for the prevention of dust, for experience has taught us that the dust hazard is to a large extent preventable or removable, because conscientious efforts put forth with that intent have been rewarded with conspicuous benefit.

Classification of the Dusty Occupations according to the chief variety of dust found therein. (Hoffman).

Group 1. Exposure to metallic dust.

- | | |
|--------------------------------|-------------------|
| 1. Grinders. | 6. Brass workers. |
| 2. Polishers. | 7. Printers. |
| 3. Tool and instrument makers. | 8. Compositors. |
| 4. Jewelers. | 9. Pressmen. |
| 5. Gold leaf workers. | 10. Engravers. |

Group 2. Exposure to mineral dust.

- | | |
|---------------------|--------------------|
| 1. Stone workers. | 7. Cement workers. |
| 2. Marble workers. | 8. Plasterers. |
| 3. Glass blowers. | 9. Paper hangers |
| 4. Glass cutters. | 10. Molders. |
| 5. Diamond cutters. | 11. Core makers. |
| 6. Potters. | 12. Lithographers. |

Group 3. Exposure to vegetable fiber dust.

- | | |
|--------------------------------|-------------------------------------|
| 1. Cotton ginning. | 8. Hemp and cordage manufacture. |
| 2. Cotton textiles. | |
| 3. Spinning. | 9. Jute and jute goods manufacture. |
| 4. Weaving. | |
| 5. Hosiery and knitting. | 10. Paper manufacture. |
| 6. Lace making. | 11. Cabinet makers. |
| 7. Flax and linen manufacture. | 12. Wood turners and carvers. |

Group 4. Exposure to animal and mixed fiber dust.

- | | |
|------------------------------------|---|
| 1. Furriers and taxidermists. | 4. Carpet and rug manufacture. |
| 2. Hatters. | 6. Shoddy manufacture. |
| 3. Silk manufacture. | 7. Rag industry. |
| 4. Woolen and worsted manufacture. | 8. Upholsterers and hair mattress makers. |

Group 5. Exposure to municipal dust.

1. Street cleaning and refuse disposal.
2. Drivers and teamsters.
3. Coachmen, cabmen and omnibus drivers.
4. Subway employees.

Group 6. Exposure to general organic dust.

- | | |
|-----------------------------------|--|
| 1. Grain handling and storage. | 9. Saddle and harness makers. |
| 2. Flour milling. | 10. Glove making. |
| 3. Bakers and confectioners. | 11. Boot and shoe makers. |
| 4. Starch manufacture. | 12. Cork cutting and grinding. |
| 5. Tobacco industry. | 13. Pearl and bone buttons manu-
facture. |
| 6. Snuff manufacture. | 14. Comb manufacture. |
| 7. Leather workers. | |
| 8. Tanners, curriers and beamers. | |

In this list are included sixty-one different trades, which cover a large field of industrial activity. Statistical data on the mortality from respiratory diseases including pulmonary tuberculosis, among male workers in these occupations, also the number of males employed therein, by age groups, have been compiled by F. L. Hoffman, in Bulletins 79 and 82, issued by the U. S. Bureau of Labor.

“PETROMORTIS”—A NEW DISEASE?

“Petromortis”—a word frequently used in the newspapers to designate deaths caused by inhaling fumes from gas engines’ exhaust, is commonly believed to be a new disease following the wide-spread use of the automobile. The word “Petromortis,” coined from a combination of petrol or petroleum and mortis the Latin word for death, will, perhaps from its construction, perform a service in bringing to the attention of garage workers and automobile owners that, in a poorly ventilated garage, gas engine fumes are always dangerous and sometimes deadly. Within the last few months, several deaths have been caused by continued inhaling of gas engine fumes.

“Petromortis” is simply carbon monoxide poisoning. The wide publicity given this supposedly new disease has evoked the following editorial comment in the Journal of the American Medical Association of January 1, 1916:—

“The gas engine and the gasoline motor have also brought with them the unanticipated possibility of inducing intoxication from carbon monoxide. Whenever the explosion of the combustible mixture is incomplete or of moderated intensity, this gas may be formed in not inconsiderable amounts. Outdoors this is of little consequence; but indoors carbon monoxide as well as other combustion gases of the omnipresent motor may produce dangerous contamination of the atmosphere. This should now be widely recognized in the interest of hygiene.”

Carbon monoxide is one of the most dangerous as well as one of the most common gaseous poisons. Its dangers confront one, not only in the industrial world, but also in domestic life. As so-called "coal gas" it causes deaths in the homes, and in fact is found as a menace wherever there is incomplete combustion of ordinary fuel.

Carbon monoxide does not suffocate. It enters the body as a poison, it is taken up by the blood through the lungs and causes structural changes which cause death.

It is a poisonous gas that cannot be detected by senses of taste, sight or smell. Although it is frequently accompanied by other gases, principally sulphur compounds which have a distinct odor, the deadly carbon monoxide is in itself odorless, colorless and tasteless.

One per cent of carbon monoxide in an atmosphere is almost certain to cause death. As little as one-tenth of one per cent of carbon monoxide in the air produces symptoms of illness in persons breathing such atmosphere.

When this gas is breathed in small amounts it causes among other symptoms headache, dizziness, vomiting, palpitation of the heart and injurious changes in the blood.

In the industrial world, workmen are frequently overcome by this gas. This condition occurs most frequently at blast furnaces, gas works, coke ovens, lime kilns, automobile garages and in fact wherever workmen are exposed direct to the products of combustion.

A fortunate condition in the industries is that other workmen are usually in the neighborhood when a man is overcome and the victim is immediately removed to fresh air. A workman overcome while alone in an unfrequented place or a closed garage, is in very great danger; in fact the result is almost always fatal.

In garages where fatalities of this kind have occurred in recent months, the building has usually been a small one intended to accommodate only one car and with no means for ventilation excepting through the doorway.

A closed door has practically been the cause of every death in these cases. The victim has closed the door to protect himself from the cold weather.

In "warming up" an automobile engine the usual amount of carbon monoxide generated may be increased by imperfect combustion of the gaseous vapor, but even without such increase, in a small unventilated space, the fatal ratio of one part of carbon monoxide to ninety-nine parts of air can very quickly be reached.

The only method of preventing serious results, when this gas is present, is to dilute it very freely with fresh air. Persons having

in their charge automobiles, or gas or gasoline engines used for other purpose should bear this fact in mind. They should prohibit employes from operating any engine in a small enclosure unless such enclosure is very freely ventilated.

STATE REGULATION OF BAKESHOPS.

An apparent misunderstanding of the requirements for operating a bakery in Pennsylvania has doubtless been responsible, in the past, for infractions of bakeshop regulations that have come to the attention of this Department. To prevent bakeshop owners from unknowingly violating the law, the Department calls attention to Sections 17 and 18 of the Act of Assembly, approved May 2, 1905, which read as follows:

"Section 17 . All persons, firms and corporations engaged in the manufacture or baking of bread, cakes, crackers, pastry, pretzels or macaroni for public sale, shall keep their room or rooms for baking, mixing, storing, or sale of flour or other grain products separate and apart from any sleeping room, water closet, urinal, defective drain or sewer pipe, and shall not permit the harboring of any domestic animal therein. The floors of all baking, mixing, storing and sales rooms shall be kept clean and tightly joined and free from crevices, and the walls and ceilings shall be painted, kalsomined or white-washed as often as twice in each year, and oftener, if in the opinion of the Commissioner of Labor and Industry or his inspector, the safety of the employes or the public shall require.

"Section 18. When the foregoing provisions of Section 17 are complied with, the Commissioner of Labor and Industry or his inspector shall issue to the owner or person in charge of such bakeshop a permit,* stating that the same is in a clean and sanitary condition; which permit shall be posted and kept posted in the office or salesroom of the bakeshop, aforesaid; but when any of the foregoing provisions of Section 17 are not being complied with in any bakeshop, the Commissioner of Labor and Industry or his inspector shall issue to the person in charge, or his representatives, a written order to comply with the law aforesaid, within ten days; or he may order the closing of such bakeshop until the order shall have been complied with, should the safety of the employes or the public, in his opinion, so require."

*No charge is made for issuing the permit.

It will be seen from the section of the law quoted above, that before any bakeshop may operate, it must first receive a permit. This permit is issued by the Department after an inspection of the premises indicates that all the laws and regulations have been complied with.

By a further reference to the sections of the law quoted, it will be seen that the bakeshop, after it has been approved and the permit issued, must be maintained in a clean and sanitary condition. Otherwise the Department may order the closing of the bakeshop and revoke the permit, thereby causing a monetary loss and possible loss of custom.

The Department of Labor and Industry is ready and willing at all times to render such assistance as it can, in helping any person or persons to construct a proper bakeshop, and suggests that the time to procure such assistance is before beginning any work on erection or alteration; that is, on new buildings or the conversion of buildings which have never before been used for the purposes of a bakeshop. All such places must conform to the Industrial Board's Regulations.

The proper procedure, therefore, for any person or persons desiring to operate a bakeshop, is for such person or persons to apply to the Department of Labor and Industry for such a permit. This application should be made before the bakeshop is opened, as otherwise the baker renders himself liable to a prosecution for a violation of this law, which carries with it a penalty fine of not less than twenty-five dollars (\$25.00), or imprisonment of not less than ten (10) days in the county jail.

The Department has no desire to prosecute any person for not following the laws and regulations governing bakeshops, when it is palpably through ignorance of the requirements, and therefore hopes that all persons contemplating the opening of a bakeshop will give strict heed to the proper method of procedure.

BENZOL POISONING.

One of the hazards connected with various industries of the State and one concerning which there seems to be very little general knowledge is the danger of poisoning from benzol. This substance is also known by the name of benzene but it is to be distinguished from the material benzine which, though pronounced the same, is spelled differently; for these two substances are not only derived from

different sources, but they also vary from each other in their action upon the human body. Benzine is obtained from petroleum; benzene or benzol is obtained from coal-tar and poisoning from this substance is very much more serious than poisoning from benzine.

Benzol poisoning may occur by the absorption of the fumes through the lungs, by the absorption of the liquid through the skin or by its absorption through the digestive system. It is the breathing of the fumes and the contact of the liquid with the skin that constitute the great dangers. While many employers know that it is a poisonous substance, they are not familiar with its effects or with the methods to be used for preventing poisoning from it. Even fewer of their employes realize its dangers and in fact many of them do not even know that they are using a poisonous material. For the purpose of calling attention to the dangers from benzol, an enumeration of a few of the processes in which poisoning is liable to occur is here made. These processes are: in the manufacture of benzene, nitrobenzene, aniline and aniline dyes; in carburetting illuminating and water gas; in the manufacture of rubber goods—cold vulcanizing, vapor curing, cementing and cement manufacture; in dry cleaning; in paint removing; in painting, varnishing, shellacing, lacquering, bronzing, and gilding; in the extraction of fat from bones for the manufacture of soap and fertilizer; and in the cleaning of tanks in which benzol has been stored.

In poisoning from benzol the nervous system is affected, causing dizziness, headache, ringing in the ears, tingling of the fingers; but with these symptoms there is frequently a feeling of well-being similar to the condition found in the early stages of drunkenness from alcohol. It also causes fatty degeneration of the various internal organs. This is of especially serious significance in the case of the heart and the kidneys. The blood becomes bright red, making the lips appear scarlet; it also becomes thinner than normal and hemorrhages take place readily into the skin and from the nose, mouth, kidneys and in fact from almost all the mucous membranes of the body. Severe cases end in unconsciousness, convulsions and death.

The symptoms given above are the result of large amounts of the poison acting over a short period of time. When it is taken into the system in smaller quantities over a longer time, the symptoms of chronic poisoning are produced which are headache, dizziness, dryness of the skin, loss of appetite, dyspepsia, paralysis and, in addition to great loss of blood from small wounds and from various parts of the body from apparently no cause at all, there are apt to appear changes in the blood which lead to severe anaemia.

Anyone showing symptoms of acute benzol poisoning should be removed at once into the fresh air. If the breathing is very shallow

or irregular, artificial respiration should be used until the arrival of a doctor, who is always to be summoned immediately.

Chronic poisoning should be overcome by removing the person to an occupation in which he is not exposed to the fumes.

Of more lasting effect, however, than devising methods for the relief of poisoning from benzol is to prevent it altogether. With this end in view, young men who have not reached their maturity and all girls and women should be excluded from exposure to this substance, for the hemorrhages which are so apt to occur and the degeneration of the nervous system produce more lasting effects on these individuals than on fully developed men.

All processes in which this substance is used should be carried on in large well ventilated rooms which should contain and have in operation, while workmen are present, air agitators, room exhaust fans and local exhaust hoods, preferably with a downward draft. In cold vulcanizing of rubber and in cementing, the benzol mixture should be kept in containers which do not allow the fumes to escape instead of in open mouthed jars as is often the case. Workmen should not sing or whistle and should speak as little as possible in order to prevent unnecessary inhalation of the fumes. If with all these precautions the fumes are not satisfactorily removed, tightly fitting respirators supplied with air under pressure should be provided. In cleaning tanks used for the storage of benzol the men should always wear smoke helmets supplied with air or oxygen.

The saying, "A safe workman is the best safety device" is nowhere truer than in plants using benzol, for while it is the duty of the employer to provide safe methods of operation and to inform his workmen of the dangers to which they are exposed, it nevertheless remains with the workman, himself, to use the methods offered for his protection.

HINTS FOR SAFETY AND HEALTH.

Warnings safeguarding foundrymen, bakers and machinists from the hazards peculiar to their occupations have been issued in separate folders entitled "Timely Hints", by the Department of Labor and Industry. Up to this time ten of these pamphlets have been issued. Each folder makes a popular appeal to the workmen to guard against dangers peculiar to the trade in which they are employed. Copies of these folders may be obtained by application to the Department of Labor and Industry, Harrisburg, Pa.

The "Timely Hints" available in folder form are for: Employer and employe, general industrial workers, elevator operators, steam boiler firemen and attendants, employes in mercantile establishments, painters, printers, machinists, bakers and foundrymen.

The precautions included in the last three pamphlets are as follows:

TIMELY HINTS FOR FOUNDRYMEN

Colds

Keep out of drafts while wearing damp clothes.

Change to dry clothes before going home. By doing this you will save yourself from lumbago and other rheumatic pains.

Brass Chills

Single attacks of "shakes" may do no more than disturb a night's rest or keep you from work for a few hours. Repeated attacks weaken your digestive system and lessen your strength. Avoid them by not breathing the fumes of the molten brass or other zinc compounds.

See that the casting room is well ventilated, especially on damp cold days.

Dust

Hard, sharp mineral dust from cleaning castings scratches the delicate lining of the lungs, makes you cough, lowers your vitality and makes you more susceptible to consumption.

See that devices for removing the dust in connection with dry tumbling mills, sand blasting and all grinding and polishing machinery are in proper working order.

In sand blasting have your helmet well fitting and keep the sponge in your respirator damp.

Burns

Wear Congress shoes and keep them in good repair; laced or buttoned shoes cannot be taken off quickly enough in case of spills.

Leggings that can be rapidly removed and that have neither wrinkles nor projecting fasteners to catch the hot metal have saved many workmen from severe leg burns.

Keep molten metal from spattering into your eyes by making sure that all ladles are dry before using them, and by wearing goggles.

When filling a ladle from a continuous stream of metal, cut from the front; never from the back.

Spitting

A dirty, dusty room with no cuspidors invites spitting on the floor. You breathe the dust and germs together. One man with tuberculosis can give it to every other man in the shop in just this way. Keep floors as clean as possible and see that every man who must spit uses some kind of cuspidor that is cleaned frequently.

Heavy Lifting

Lifting heavy material often causes severe strains or ruptures. If you wish to move large castings or other heavy articles obtain sufficient help or use proper hoisting apparatus.

Gloves

Use hand leathers or leather gloves in handling scrap and hot or rough castings. A small scratch or burn is often the beginning of blood poisoning which may mean the loss of a hand or an arm.

Eye Protection

Use goggles when chipping. They have saved the eyesight of many workmen.

Hand Tools

See that all hand tools are properly dressed. Never use "mush-roomed" chisels or hammers. A flying chip from tools in bad condition may cause the loss of your neighbor's eye or your own.

Order

Prevent accidents by having:

Material neatly piled.

Flasks arranged in rows with convenient aisles between them.

Aisles always kept clear of anything that might trip a workman.

One fixed way for men carrying full ladles to pass each other and thus avoid collisions.

Your health and safety depend on the carefulness of your neighbor; he is likewise dependent on you.

Your family needs you; his needs him.

Can they count on you?

TIMELY HINTS FOR BAKERS

Cooperate with Your Employer in Keeping the Shop Clean. Daily Clean-ups and Frequent Scrubbings are Absolutely Necessary.

Do not go into the open air direct from the bake room or while overheated unless properly protected from the cold. Sudden exposure of this kind frequently leads to pneumonia or rheumatism.

Flour dust irritates the lungs and increases your chances for developing tuberculosis. Handle flour and empty bags carefully. Do not shake out empty bags in the workroom.

If you have a sore on your hand or arm, quit work until it is well. Handling dough, bread, and tools lengthens the time for it to heal and may endanger your patrons.

Good lighting is necessary for good eyesight and good health. Have clean windows and plenty of light but avoid a direct glare, particularly from lights shining into your eyes instead of onto your work.

Bakers often have pains in their feet and legs. If you have this trouble, consult a doctor. It is probably flat foot, and not rheumatism and the advice of a doctor should be carefully followed.

Do not clean any machine while it is in motion. Many serious injuries have resulted from disobeying this rule.

The Safety Standards for Bakeshops published by the Industrial Board of the Pennsylvania Department of Labor and Industry refer almost entirely to the shop itself. One section, however, entitled "Personal Sanitation" applies to the baker himself, it says:

"No person suffering from a communicable disease shall be employed. Persons working in bakeshops shall be subject to medical inspection under the supervision of the Department of Labor and Industry. Outer clothing used by bakeshop workers when on duty shall be of washable material (preferably white) and shall be kept clean at all times. The smoking, snuffing, or chewing of tobacco or snuff, the scraping of hands and arms with a knife to remove the dough, the open blowing of the nose, expectoration, wetting the finger in the mouth and all other insanitary personal practices are forbidden."

TIMELY HINTS FOR MACHINISTS

Guard your Health

Cuts, bruises and other injuries should immediately receive proper antiseptic treatment. Spit or tobacco juice cannot be classed as such. They may cause infection.

Breathing dust continually decreases a person's vitality and makes him susceptible to lung diseases. Use respirators and see that exhaust systems are in working condition.

Glaring light causes impaired vision. Protect your eyesight by use of proper shades.

Lifting heavy material often causes severe strains or ruptures. If you wish to move machinery or other heavy articles, obtain sufficient help or use proper hoisting apparatus.

Wear goggles when performing work where there is danger of chips or other material striking the eyes. Chipping, babbitting, grinding, turning, riveting and milling are processes where this may occur.

Guard your Safety

Cleaning, oiling, repairing and adjusting of machinery should not be done while machinery is in motion.

Do not allow projecting set screws, keys, bolts or other projecting parts on moving machinery.

Use of defective hoisting apparatus endangers your safety. Hoisted loads should be securely blocked before work on them is started.

Shifting of loads have repeatedly caused serious crushes.

Place tools or material where they cannot be knocked or jarred so as to fall on yourself or fellow workmen.

"Mushroomed" tools cause flying chips. Keep hand tools properly dressed and in good condition.

Carelessness, fooling, horseplay and the like have no place in a well ordered shop. It is to your own interest to prevent them.

Keep all safeguards on gears, belts and other moving parts of machinery. See that others do the same. You may in this way prevent an accident to yourself or to your fellow employe.

Loose clothing has repeatedly been the cause of many employes getting caught in moving machinery. Keep jackets, sleeves, etc., buttoned or properly fastened. Torn or ragged clothing is a constant menace to your safety.

Tools or materials should not be allowed to lie on floor or passageways. Tripping over such objects, especially when the hands are full, has resulted in many accidents, some of a very serious nature.

Compressed air apparatus is useful but dangerous. Never point it towards or touch a fellow employe with it. Three deaths resulted, last year in this State, from "fooling" with air hose.

Defective wrenches are a constant source of danger and have caused serious injury to many machinists. Do not use them until repaired.

The promotion of safety is a paying proposition.

Last year in Pennsylvania over \$1,000,000 in wages were lost by injured employes. Possibly 50 per cent of this loss could have been avoided if workmen had not been careless.

HAZARDS OF GAS WORKS

Presented before Public Utilities Round Table Sectional Meeting of the National
Safety Council. Jas. B. Douglas, Manager Claim Department, The
United Gas Improvement Company, Philadelphia.

With but few exceptions the hazards met in the operation of gas works are those met in other industrial plants. Many persons think that "gas accidents" predominate in the casualty experience incident to the manufacture of illuminating gas. Such, however, is not the case. The result of a survey of some 6,200 employe accident cases reported by 119 gas companies located in 35 states, which I have just completed for the American Gas Institute, showed that the accidents peculiar to the industry were:

Leakage of gas, outside (including 3 fatalities),	1.03%
Leakage of gas, inside, ...	1.62
Explosions (including 3 fatalities), ...	3.01

Amounting in all to but 5.66% of the total cases received. The remaining classifications were:

Machinery in operation (including 1 fatality),	2.63
Elevators (2 fatalities), ...	2.19
Falling in or through openings (1 fatality), ..	4.23
Hot material (1 fatality), ...	4.88
Objects, hanging or swinging, ...	.75
Objects, protruding, ...	4.36
Objects, falling (1 fatality), ...	11.29
Flying particles, ...	7.87
Vehicles (3 fatalities), ...	8.69
Nails, wires, etc., ...	6.53
Handling of material, ...	9.73
Slipping or tripping, ...	8.93
Hand tools used by injured, ...	12.80
Hand tools used by fellow employe, ...	2.19
Animal bites, ...	1.75
Miscellaneous (1 fatality), ...	5.52

From this it will be observed that in combating the accident, frequently we are confronted by the problems met by other employers in the industrial world.

Although time forbids going but lightly into the subject to which I have been assigned, I shall endeavor to give you an idea of some of the most likely causes of accidents around a gas works:

In the generator house some of the accidents are due to—

Employes not standing at a safe distance from the mouth of the generator after opening the lid, in order to avoid being burned by the burst of flame which immediately follows the removal of the lid.

Pieces of fuel falling from overhead conveyor and its supporting structure. To be prevented by trimming and the removal of any loose pieces lodged overhead.

Tripping over obstructions or tools left on the floor; and catching feet in holes in the floor. Of course obstructions should be removed as far as practicable. Tools should be stored out of the way, preferably in racks, and the holes should be closed.

Falling of tools and similar articles from floors. This type of accident is prevented by copings or toe pieces around the edges and openings of the floors.

Hot material getting into workmen's shoes while they are engaged in clinkering; striking knuckles against the floor or against standing objects while engaged in the same operation; misblows in sledging; also scalds due to carelessness in not standing at a safe distance when wetting down clinkers. Accidents in the class first mentioned are prevented by lacing shoes snugly or by wearing Congress shoes. To prevent accidents in the other classes, it is only necessary to Be Careful First.

Collisions between and with fuel buggies and barrows. Where conditions permit, buggies and barrows should not be returned over the course used when loaded. In other words, a oneway passage is the safest.

Loose floor plates. Uncovered seal pots and relining bricks insecurely piled are also hazards to be looked for. All floor plates should be securely fastened in place when set, and if they become wobbly they should be immediately secured in place. Seal pots should be covered or surrounded by guards, as serious accidents have been caused by employes stepping into these pots and sustaining burns which have become infected.

It is important to see that bricks are so piled that they will not become overbalanced. (In this connection, I am glad to note striking illustrations of the safe and unsafe ways of piling bricks, in Bulletin No. 90 just issued by the National Safety Council.) When men are at work relining generators, it is advisable to place a screen over the opening in the tops of the generators to protect those inside from being injured by falling bricks and fuel.

Foot injuries due to the absence of toe guards at the floor levels of elevator shafts, are also experienced from time to time. These are prevented by toe-plates installed at the floor levels. If the plate

is set at the proper angle, the employe will involuntarily withdraw his foot to the platform as soon as it is touched by the toe guard; if not, the toe guard itself will automatically return the foot to the platform and serious injury will be avoided.

In the retort house are found a number of hazards in addition to some of those just mentioned. They are:

Unguarded coke holes in floors in front of retorts, resulting in employes stepping therein while clearing up coke, etc. Unless care is exercised to see that employes working in the cellar near these holes are warned before the hot coke is dropped, they are liable to be burned.

Steam, which results in scalds when employes stand too close to the pile when wetting down hot coke.

Hot tar, which causes burns and eye injuries when employes fail to wear goggles and gloves while bulling or cleaning the pipes which conduct the gas from the retorts to the hydraulic main.

Employes are also liable to be run into by charging and discharging machines while closing retort doors, if not very careful. It is advisable to place a signalling device, such as a horn or gong, on these machines to give warning when they are about to move. It is important also to see that the gears of these machines are guarded. The wheels also should be guarded to prevent foot injuries.

In the boiler and engine rooms care should be exercised to see that the passageways are kept clear, and that fire tools, barrows and other obstructions are kept in their proper places. Fuel and ashes should also be kept within restricted limits.

At times nails and pegs are found extending from walls at face level to hold tools and clothing. Such projections make dangerous hazards when not in use, and they should be removed. Clothing should be hung in lockers and firing tools should preferably be kept in racks.

It is also dangerous to leave weights on dampers and regulator levers on account of the likelihood of their falling and causing injury.

Loose bricks are frequently found on the tops of boiler sets, and they should be promptly removed or rebedded.

Where a safety valve blows off across the top of a boiler, the outlet should be so extended that the steam will be discharged vertically, above body level if practicable.

The bursting of water gauge glasses is comparatively frequent, and care should be taken to see that proper guards are installed to protect the eyes of employes engaged in adjusting these gauges.

Where boilers are connected in battery, separate blow-offs should be run in order to avoid the possibility of the steam backing up while the boilers are being cleaned or repaired.

Moving machinery, shafting and belting should be guarded either by railings or expanded metal screens. (It is important to become familiar with the safety standards prescribed by the State).

When cleaning purifier boxes in purifier houses, employes are liable to be affected by gas in the absence of proper ventilation. Care should be exercised to see that employes do not work in too close proximity when forking oxide. Minor injuries such as puncture wounds due to fork tines, because of the presence of the oxide, are very likely to result in blood poisoning.

The soles of the shoes worn by employes engaged in this work should not have holes in them because of the likelihood of infection following a mere scratch on the foot.

The passageways between purifier boxes usually being narrow, it is especially important to see that tools are not allowed to remain thereon.

The principal hazards in the coal shed are falling objects and insecure walkways and platforms and unguarded trestles, from which employes have fallen and sustained serious injuries. Every effort should be made to keep loose pieces of coal and tools off trestles and the ledges at the tops of the bins, in order to avoid head injuries.

Care should be exercised to see that walkways and platforms are of the proper width, and that proper railings are provided where practicable.

Naked flames should not be permitted where coal dust is present, as they might ignite the dust.

In the yard, care should be exercised to see that barrows and carts are stored in their proper places in order that they will not be run into by thoughtless employes. If necessary to have a guy line at body level, a warning sign should be hung thereon.

Valve stems and boxes above grade in passageways should be leveled in order to avoid the tripping hazard.

Boards and discarded material should be piled at points designated therefor. It is safest to bend over or remove old nails from loose boards.

Small pipe lines running across yards should be boxed in or placed below the ground level, preferably the latter.

Care should be exercised to avoid placing guys and marking stakes where liable to cause employes to trip, and as soon as the guys and stakes have served their purpose, they should be removed.

Gates should be made fast so that they will not swing in the wind and strike employes.

All persons should be kept off the ash dumps as far as practicable owing to the likelihood of their stepping into concealed fires.

Exhausts should be made to discharge vertically and above head level.

Sumps or steam pits should be so located that the steam will not cloud passageways.

Railings should be placed along stairways and around platforms and walkways of holders; also on the galleries in front of siphon valves.

Loose material should be removed from tops of holders, stairways and platforms, from which it is likely to be blown and do harm.

It is advisable to drill holes in any depressions in the platforms and walkways in which water gathers, in order to let off the water and avoid the formation of ice, which might result in slipping accidents.

Of course systematic safety work is the most effective step towards results in this field. At our Station A Works in Philadelphia the decrease in working days lost due to accidents during the first nine months of the present year was 17%, as compared with the same period of last year, when less men were employed.

A varying difference in conditions and the size of gas companies makes it impossible to outline a safety organization that will meet every demand, but the following simple plan should fulfill the requirements of the average gas company.

The safety organization should consist of a chairman, who should be the manager, superintendent or his assistant, a safety inspector, and three other employees appointed from the manufacturing, distribution and commercial departments by the chairman of the committee. This committee should meet at least once a month, when the work of the month should be gone over and discussed. Special meetings of the committee should be called in the event of a serious accident or one of peculiar interest. Safety items in the trade journals should also be reviewed, and the committee should compile and issue such information and statistics as are applicable to the company and existing conditions, should pass upon articles, pictures, etc., for bulletin boards, should investigate and act upon such recommendations as have been submitted, and should devise ways and means to keep alive the interest of the employees to the importance of exercising care to prevent accidents. Interest in the subject is of course intensified by safety talks, lantern slides and motion pictures. First aid competitions, etc., are also very beneficial.

The safety inspector should be chosen from among the employees of the company and should be one who can devote a good part of his time to the work of looking after safety details. He should make thorough inspections of the plant periodically, noting all accident hazards and hazardous working conditions. It should be his duty to pass upon the installation and maintenance of safeguards.

The men appointed from the several departments should be chosen from the rank and file of the employees. Care should be taken in making these appointments, as the men chosen should be proficient in their own work and should command the respect of their fellow employees. The duties of these men should be, to be always on the alert to note and report accident and fire hazards, and to make weekly inspections of company work and property. All recommendations should be referred to the safety inspector, who should investigate the conditions reported and submit the result to the committee. These men should meet with the safety inspector at such times as may be desired by him, when all new cases should be reviewed and new prevention work and ideas discussed.

The personnel of the employe members of the committee should be changed from time to time in order that all suitable employes may eventually receive training in safety and broaden their knowledge of the work.

I trust that in the foregoing, which is necessarily incomplete, I have given information that will prove useful to all who are endeavoring to eliminate the accident hazards in gas works.

STATE AND NATIONAL COOPERATION FOR STUDY OF UNHEALTHFUL CONDITIONS IN INDUSTRIES.

Arrangements have been perfected by Commissioner John Price Jackson of the Department of Labor and Industry for cooperation with the Federal Bureau of Public Health Service, in investigations for the elimination of industrial diseases in Pennsylvania.

Attaches of the Federal Public Health Service, stationed at the United States Hospital in Pittsburgh, will cooperate with the State Department of Labor and Industry in the general study of vocational diseases, for the improvement of industrial conditions.

They will aid the Department of Labor and Industry in making special investigation of various industries, and the officials of the Department will similarly place at the disposal of the Federal Bureau the results of their investigations, for nation-wide efforts against vocational diseases.

The Industrial Board of the State of Pennsylvania is responsible to the people of the State to develop standards of physical safety and healthful hygienic conditions in industry and is at present, as rapidly as the facilities of the Department of Labor and Industry will permit, developing and adopting such standards.

The Department of Labor and Industry through its Inspection Bureau is required to enforce the standards and rules of the In-

dustrial Board and all laws of the Commonwealth relating to health and safety in the industries which have been assigned to it by the Legislature.

For the mutual advantage of the respective State and national activities it has been arranged that the work be conducted in a co-operative helpful manner for the purpose of enabling each governmental agency to obtain the things aimed at, to the best possible advantage. The Federal force will, so far as possible, aid the State, upon call, in making special investigations into any industry in order to eradicate harmful conditions. The Department on the other hand will whenever possible aid the National health officials.

ORDERS OF INSPECTORS MUST BE OBEYED TO REDUCE FIRE WASTE.

Proprietors of stores, owners of factories and similar establishments must comply immediately with instructions issued by inspectors of the Department of Labor and Industry to reduce the annual fire loss in Pennsylvania.

In discussing the necessity for such compliance Commissioner Jackson recently cited the following case:—

“Two inspectors of this Department recently made a rigid inspection of a store in a Pennsylvania city. The proprietor of that store was warned that a fire might break out in his establishment at any time, due to waste, packing material and oil receptacles that had been allowed to accumulate in considerable disorder. The inspectors ordered the proprietor to clean up his place immediately and left a written order for the following improvements, among other demands:

1. Clean up entire building and remove all waste paper.
2. Provide metal receptacle for ashes in basement.
3. Provide fireproof room for all oils, turpentine and all combustible material.

“The proprietor of that store was given until a specified date to make improvements and, before that time, to notify the Department that the orders had been met. No notification of compliance with the order was received by the Department of Labor and Industry and the inspectors arranged their schedule to return to that store at the elapse of the short time period allowed.

"Two days before the elapse of that time the store was destroyed by fire at a loss exceeding \$25,000. The firemen of the city, in which the fire occurred, were subjected to the gruelling hardship of fighting a stubborn fire on a bitter cold night. Families in nearby apartments were endangered and the fire caused damage in an adjacent store.

"Newspaper accounts declared that the fire was of unknown origin. It was discovered shortly after midnight but it gained considerable headway before an alarm was sent in. The newspapers also pointed out that the supply of oil, turpentine and paints within the building caused the flames to spread with great rapidity.

"Inasmuch as this Department was not notified that the instructions had been complied with, it is probably proper to assume that they had been disregarded. If the building had not been destroyed and if the inspectors had made a reinspection on the specified day and had instituted a prosecution because the orders had not been obeyed, such action might have been regarded, in some quarters, as persecution. This fire merely emphasizes the reason for prosecutions instituted by this Department for violations of instructions to guard against fire."

INCLINES SUPERSEDE STAIRWAYS FOR GREATER SAFETY IN PUBLIC SCHOOLS, FACTORIES AND PUBLIC HALLS.

Architects of modern buildings are cooperating in sacrificing space for safety in the erection of schools, factories and public halls by substituting inclines for the old type of stairway. In Fort Wayne, Indiana, a new school building has been equipped with an incline instead of a stairway. The "Monthly Bulletin" of the Indiana State Board of Health discusses the innovation as follows:

"Fort Wayne has the honor of being the first city in the State to have a public building in which the stairway is superseded by the incline. In the new Harmar Street School building, recently completed, two inclines lead from the first to the second floor. These inclines are of re-inforced concrete construction, overlaid with battle-ship linoleum and have a gradient of one foot in six. On account of some opposition to the adoption of the incline, a wide stairway leads to the second floor of the building at one end of the main corridor. The principal of the school states that 95 per cent of both teachers and pupils use the inclines, practically abandoning the stairway.

"The advantages of the incline over the stairway are:

1. It permits pupils of whatever age to take their natural step whether going up or down.
2. It makes it possible for crippled pupils to go easily and safely from one floor to another.
3. In case of panic from fire or other cause the incline is infinitely safer than the stairway.

"In fact the only disadvantage of the incline is that it requires more room for construction than the stairway. Now that Fort Wayne has led the way it is to be hoped that wherever possible in our larger school buildings throughout the State, the back-breaking, deformity producing, stairway will be superseded by the incline."

ANALYSIS OF THE WORK OF THE BUREAU OF EMPLOY- MENT OF THE DEPARTMENT OF LABOR AND INDUSTRY.*

Until last winter brought to the minds of the people of Pennsylvania, through no gentle warning, the great need of an effectual method of meeting the then serious problem of unemployment, no plans were definitely made along that line. But during that winter two bills were framed and presented to the 1915 Legislature recommending the creation of a Bureau of Employment in the Department of Labor and Industry.

The bills were two in number because the work was to be two-fold, namely, a system of labor exchanges throughout the State with headquarters at Harrisburg, and also a system for licensing and regulating the business of private employment agents throughout the State.

Up to this time, private employment agents, according to the law of 1907, were licensed in cities of the first and second class. Philadelphia had a list of over a hundred licensed agents; Pittsburgh, between seventy-five and a hundred; Scranton had only two or three. The regulation of these agencies was more a matter of name than of accomplishment, as in the two larger cities, one person only was in charge of the entire list of agents in his city, and inspections were rarely made except on actual and serious complaint. According to the provisions of the bills introduced in Legislature last spring, the control of all private agents in the State was given to the State Bureau.

*From an address by Jacob Lightner, Director of Bureau of Employment.

These bills were finally passed in June, 1915, and on October 1st, the Bureau commenced its work. The first task was the organization of the Harrisburg office which is not only the central office for the division of private employment agents, but also the Clearing House for the division of labor exchanges, and contains, in addition to these, a local office for filling positions for the city of Harrisburg, Dauphin County and the surrounding counties.

Later the Johnstown office was formed with the cooperation of the Associated Charities of that city and about the same time, the Philadelphia office, in cooperation with the Emergency Aid Committee, began its work.

It is the plan for the near future that a number of additional district offices be opened up, as the employment work must have centers in all the different sections of the State so that as broad a field as possible may be explored to find just the right man to fill the right job. Without a wide-spread system the State will fail just as private agencies sometimes fail, because a good position is unknown to a good man on account of the barrier of distance. However, it is the purpose to move slowly at first and to get the local centres working well within their local districts, before this broader work in the attempt at a distribution of labor, is started.

The three offices are now cooperating with one another. The Johnstown office may write in to Harrisburg that a farmer is needed in a certain nearby country town. In the Harrisburg office there are many farmers applying for work, so we are able to help out in this case. Or Philadelphia may write for assistance. It may be of a kind we cannot supply directly, so we write to Johnstown stating the need and asking them to assist Philadelphia. It can readily be seen that the more centres we have to which to refer these Clearing House matters, the more likely we are to fill the difficult jobs and place the unusual applicants.

It has been the rule in the few weeks we have been operating to make sure of all positions at a distance to which we send applicants. In some cases we have used long distance phone calls, telegrams or special letters. In several cases we have personally advanced the railroad fare on the guarantee of the employer that he would refund it to us as soon as the man arrived.

The problem of railroad fares is a serious one for most applicants. It would seem that a special fund should be set aside so that loans could be made to deserving applicants. I believe that this would prove a most invaluable assistance in placing men in positions where they could do really efficient work.

Of course it is not to be expected that in sending applicants to distant jobs, mistakes will not be made either by us or by the applicant, as it is always a risk for men to move into an unknown

environment, but the total amount of good to the many in finding work better suited to their needs should outweigh an occasional failure.

It is our hope, later on, to be able to encourage men to take farm positions and to impress them with the dignity and real economic value of this work done in an intelligent manner. So many men apply to us for clerical positions, who are not at all fitted for such an occupation. These men would make good agriculturists if they did not, through false training, have an idea that such work required no intelligence and that to accept it, was to lower the standard of their self-estimated capabilities. Our universities are doing splendid work in their agricultural courses to change this prevalent false attitude and it is my hope that the Bureau of Employment can assist in this most important educational movement.

A valuable work that is just beginning, is the placing of juveniles. That has been one of the greatest needs for many years, and up to the present year, entirely neglected. School children have been set adrift at the age of fourteen to seek employment anywhere at all, and school principals and teachers have had no responsibility in the matter. Many of these fourteen-year-olds have preferred loafing to working and there has been no great effort made to keep them from this demoralizing habit.

Act 373, Section 19, now requires that this Bureau shall cooperate with local school authorities in the placement of children between the ages of fourteen and eighteen. In case the school authorities have already established vocational training and placement bureaus, the work of the Bureau of Employment is merely to assist in any manner that may be deemed advisable according to the circumstances. But in localities where no such placement bureau has been organized, the State Bureau must send blank forms to school principals to be used in having the children make out applications for work for the use of employers in making out orders for the children to work. The form used for having the child register for a position is extremely interesting as it shows that for the first time in its history, Pennsylvania is going to try to help the children to get the sort of work they should have. The most important questions asked are the following: Kind of employment desired, name, age, father's place of employment; weight, height, color, nationality; number in family, number at work (males, females); approximate weekly income of family; causes for leaving school to go to work; necessity, help desired though not necessary, dissatisfied with school, prefers work, other causes; child's signature. The following information is to be furnished by the school principal: Do you think the child above named fitted for the occupation desired? If not, what occu-

pation do you recommend? Signature, school. You can see from the above that a real effort is going to be made to assist the child to find suitable employment; to assist, advise, instruct him to the best possible choice.

Of the employer, the following questions are asked: Name, address, number of hours per day or week the child must work, character of work to be done, sex of child desired. "It is our wish to employ a child regularly, or, only in periods when the schools are not in session. Wages to be paid child, opportunities for advancement, number of weeks averaged our employes per year; this firm now employs blank number of children over 15 and under 16."

It is expected that the work of placing juveniles will be one of the most interesting parts of the work of this Bureau and one of the most gratifying. Although the Bureau is only secondary in this matter, and is allowed to take part only where the school authorities are not yet prepared with their juvenile employment work, even a small share in so great and worthy a cause is jealousy guarded. The Philadelphia office is now cooperating with the Juvenile Vocational Guidance and Placement Bureau under the Board of Education and it is our hope to have this cooperative work very soon started throughout the whole State.

This plan will give the State Bureau a wide knowledge of the condition of the labor market throughout Pennsylvania as far as the employment of children goes, and means are also being prepared for a similar knowledge of the condition of employment for all ages of workers. A uniform record sheet is being prepared which is to be sent to all private and philanthropic agencies, to agencies connected with employers' associations and to those connected with labor unions. By means of these reports, the number of applicants applying to them, the number of employers' orders and the number of positions filled, will all be at the command of this Bureau.

Such a record together with the reports of our own offices, and the reports of the work of the private licensed employment agents, should give a fairly good estimate of general conditions of the labor market in Pennsylvania.

The division of this Bureau which has to do with Private Employment agents is of as great importance as the division of labor exchanges. For many years the private employment agents of Pennsylvania and especially the padroni have gone on their way unrestricted, and their way has not been that proverbial "Straight and narrow" one.

Act 397 of the last session of the Legislature has taken away one of the chief source of frauds from these agents, namely, the charging of a registration fee. While agents could charge regis-

tration fees, they could live comfortably without much exertion. If an agent were really very inefficient in supplying positions to his patrons, yet if he had any skill at deception, which strangely enough seems to be a strong asset with men lacking real business ability, he could reap a nice reward on registration fees.

In a large city, especially, such a large majority of the applicants are transient, that an agent can without much risk, take registration money and do little toward getting the applicant a job. His patrons are for the majority too widely scattered to carry complaints to one another of their treatment at employment offices. Often they are sent away from the city by an agent, to a position that has been misrepresented. On arriving they find that the work is only temporary, or that the wages are much lower than was stated by the agent, and often they find that they have been sent where there was no work at all.

The new law provides that all money shall be refunded on demand when the applicant finds that through no fault of his own, he has failed to secure employment. In a case where an applicant has been sent a distance, such a refund has in the past not usually been demanded, and even when demand was made through correspondence, it was unsuccessful. Also personal demands for refund for legitimate reasons have been refused persistently by agents.

Since the new Bureau has been established, a record of six weeks shows a refund of \$96.00, through the work of one investigation in Philadelphia, and this when the Bureau was just starting and most likely known only to a very small proportion of the number of applicants registered with the private agents.

At the present date, during the period from October 1, 1915, this Bureau has licensed 182 agents in Pennsylvania, of which 128 are in Philadelphia, and 43 in Pittsburgh and 11 in other places.

A few padroni have received licenses but we believe that a large number of these agents yet remain to be discovered. Their work is in especial need of inspection and regulation and we shall make a special effort to locate them during the following summer and compel them to take out licenses. We expect to provide padroni with a special form of contract for applicants to sign, a contract that will protect the applicants from being sent on journeys to jobs that afterwards are discovered to be not as represented.

For protection of laborers in labor camps, especially for the protection of the foreign laborers, this Bureau has been given the duty of inspecting labor camps, and also of prescribing minimum standards of sanitation for all such temporary quarters. At the present time, there is before our Industrial Board a recommendation of this kind.

The provisions of the Act 397, in regard to immigration, is mostly concerning investigation and statistical report, rather than remedial action. At the present time this Bureau can only refer matters concerning the welfare of immigrants to bodies already possessing the proper jurisdiction for the individual cases, but has in itself no power to correct abuses except those that come within the scope of the regulations of private employment agents as in Act 397, and with laws already in existence concerning the sale of steamship tickets or orders for transportation. Section 19 of Act 397 gives in detail the full power of the Bureau as regards immigrants.

One other work of the Bureau remains so far without comment and that is the proposed plans for an effort at the correction of the general problem of unemployment. Section 12, of Act 373 provides that the Industrial Board shall (a) devise plans and take steps toward the regularization of employment in the industries and seasonal trades of the State. (b) Investigate the feasibility of, and induce the State, counties, cities, boroughs, towns, and townships to undertake, public improvements during the periods of unemployment. (c) Cooperate with any persons, employer, official association, or organ of the press whatsoever, for the accomplishment of the aforesaid purposes; appoint sub-committees for juveniles, farm laborers, and for other purposes; and the membership of these sub-committees may be enlarged to include persons outside of the board, but each sub-committee must be presided over by a member of the board.

Also in addition to this, representative councils are to be formed as in Section 13 of the same Act:

Section 13. "Each district and local office shall have a representative council, appointed by the commissioner. The council shall consist of six members, one of whom shall be a woman, and all of whom are citizens of the United States and of the State, and residents of the district where the council is to serve. One member shall be an employer, not a member of any employers' association; two members shall be representatives of employers' organizations; one member shall be a working person, not a member of any organization of working people, and two shall be representatives of organizations of working people."

The following are the duties of each council:

The council in each district shall, (a) devise methods and take steps toward the regularization of employment in the various industries and seasonal trades of the district.

(b) Devise plans and take steps to promote public improvements by municipalities within the district, during seasons of unemployment.

(c) Cooperate with any person, employer, association, or organ of the press in accomplishing the aforesaid purposes.

It can be seen that if it were possible to accomplish even a hundredth part of all this work that the law provides for the State Bureau of Employment, the millenium would be at hand.

However, we are going to make a brave effort towards this hundredth part and feel that even though we may not attain even this, that we shall at least find employment conditions growing a little better each day because of our persistence at a righteous task.

WOMEN IN PENNSYLVANIA INDUSTRIES.

Almost 10 per cent of all women and girls over 14 years old in Pennsylvania were employed in 20,571 industrial establishments that submitted reports to the Bureau of Statistics and Information of the Department of Labor and Industry during 1914.

The reports show that 216,299 females, of whom 14,187 were between the ages of 14 and 16, were on the payrolls of Pennsylvania industrial plants. This record does not include every industrial plant within the State and completely excludes mercantile establishments and professional offices where many thousands of women are employed. The Federal Census Reports for 1910 set forth that there were at that time approximately 2,500,000 females in Pennsylvania over 14 years of age.

According to the statistics compiled for 1914 under direction of Labor Commissioner John Price Jackson, there are 67,166 women in this State engaged in the manufacture of clothing. More women are employed in that industry than in any other.

Textile establishments employ 56,253 women; tobacco factories 24,395; food and kindred products establishments, 11,198; metal plants, 10,611; laundries, 8,121; printing plants, 7,506; leather and rubber goods mills, 6,647; paper and paper products factories, 6,309; chemical works 3,227; clay, glass and stone industries, 2,877; wood working plants, 1,957; industries allied with building trades, 660; agriculture, forestry and fisheries, 383; liquors and beverage production, 363; mines and quarries, 66; engineering and laboratory service, 22. In addition to that classification there are 8,538 women engaged in miscellaneous industrial employments.

Under the classification for clothing manufacture, 27,930 women make hosiery; 7,621 make men's furnishing goods, 3,567 men's other forms of apparel and 5,870 work on women's clothing. Corset manufacture keeps 229 women employed.

In the various industrial pursuits, 1,209 women aid in the making of patent medicines; 145 help make brick and tile; 356 manufacture glass bottles; 4,291 make candy; 1,462 pickle, preserve, and can fruit and vegetables; 398 do engraving; 4,530 make boots and shoes; 821 build cigar boxes; 270 work on coffin manufacture; 1,050 make umbrellas and parasols; 2,138 are engaged in machinery manufacture; 399 make needles, pins, hooks and eyes; 453 make watches and clocks; 22,883 women make cigars while 1,090 roll cheroots and stogies.

BRYN MAWR ALUMNAE AID DEPARTMENT OF LABOR AND INDUSTRY IN REDUCING FIRE HAZARDS FOR WOMEN WORKERS.

Bryn Mawr Alumnae of the Classes of 1889 to 1892 have contributed to a fund to make possible a study for Fire Prevention in industrial plants employing women in Pennsylvania.

This fund is virtually a gift to the State Department of Labor and Industry and in that respect is unusual as it is probably the first time in this country that college women have contributed a fund to a governmental agency for the purpose of protecting women against fire in industrial plants. The field work in this fire prevention study will be performed by Miss Fannie Travis Cochran of the class of 1902 Bryn Mawr, and Miss Florence Lucas Sanville, Barnard College, class of 1901.

Their work will be under the direction of Commissioner John Price Jackson of the Department of Labor and Industry and the results of their study, which is expected to continue for about six months, will be incorporated in the annual report of the State Department of Labor and Industry.

The announcement made by the alumnae of their contribution towards eliminating fire hazards for women is as follows:

"It was as something better than a challenge to the old academic order that a group in the class of '89 desired to celebrate their quarter century by a gift to the public. It was a true poetic impulse to give expression to the wonderful spirit of their time; a sense that they should have some learning to show for 25 years in the world.

"Some one had suggested a Greek theatre as a gift to the college, or a Spanish garden as the better choice. And these picturesque archaic proposals served to throw into high relief the distinguishing achievements of the present time; its discovery of the facts of poverty, its gathering and girding of a new public spirit to shoulder this knowledge, its promise of beauty, not only of surroundings, but of race. Their gift, therefore, it was urged, ought to express a recognition of what the college owes to the public, 'a token of Learning's new birth unto democracy.'

Only Movement of Kind on Record

"A group of 11 in all was found sharing this vision. They decided that, in order unequivocally to denote that their gift was devoted to the public at large, the State, as the symbolic representative of the organized public, was the logical recipient. The Department of Labor and Industry was chosen, because the conditions exposed by the Triangle fire in New York made a heart-rending appeal for immediate help. Commissioner John Price Jackson's sympathetic reception of this unprecedented offer of cooperation from members of a college class deserves a grateful tribute. His patience and skill in helping to unravel the intricate details of a project that breaks new ground have been an invaluable assistance. For, natural and almost inevitable as the proposed relationship between a group of citizens and the State would seem to be in a democracy, it is said that no similar movement is on record in the United States.

"While this plan was perfecting, members from the three classes who were at college with '89, petitioned to join the original group. There are thus more than 60 women in the present movement. The plan of contemporary classes, a 'college generation,' joining forces to promote a piece of public work, has in this case proved so luminously successful, the cooperation has been of so high and so spontaneous an order, as to suggest that bodies of students that have shared a common life and training may well, in after years, afford finely adjusted agencies for public service.

Help Already Extended

"Of the appalling fire risks in our own factories—many of them crowded as never before on account of rush war orders—the public will learn in detail from Miss Cochran and Miss Sanville. From other hands further expressions of the broad purposes of this four-class action will be forthcoming. It is a many-sided movement, which must unfold and interpret itself as it affiliates with the public, to whom it now makes modest overture. The instant and generous

help already extended by individuals proves how deeply the fate of the young workers in New York and Binghamton, and but recently in Pittsburgh and Williamsburg, has left its impress on the community. If this investigation succeeds in rousing the wider public from its mood of apathy and wins its sympathy and cooperation, a public sentiment will, it is hoped, be created powerful enough to minimize or even to eliminate the fire danger which hourly imperils the lives of thousands of young girls and women in industry."

The committees in charge of the work are:

Executive Committee—Chairman, Mrs. George Haven Putman, '89, 335 West 86th street, New York City; Miss Edith Child, '90, New York City; Mrs. Arthur H. Scribner, '91, New York City; Mrs. Edward Cameron Kirk, '92, Lansdowne, Pa.; treasurer, Miss Mary Miles Blanchard, '89, Bellefonte, Pa.

Publicity Committee—Chairman, Miss Louise R. Elder, '89, 1629 Spruce street, Philadelphia; Miss Emily Greene Balch, '89, Wellesley College, Mass.; Dr. Mary Taylor Mason, '92, Germantown, Philadelphia; Miss Helena Stuart Dudley, '89, Boston, Mass.; Mrs. Henry Martineau Fletcher, '91, London, England; Mrs. Robert Mills Beach, '89, Bellefonte, Pa.; Miss Alice S. Cheyney, Vassar, 1909, Bryn Mawr College, Pa.

Commissioner Jackson in accepting the gift on behalf of the Department of Labor and Industry wrote to the Alumnae as follows:

"So far as I know, this is the first suggestion that a voluntary donation be made to a State department for a work of this kind. The more I consider it, the more I believe it to be a movement of unusual interest and value. It will go a long way towards opening up avenues whereby persons benevolently inclined can cooperate with well organized State departments in such a way that both their time and money will be used to the best possible advantage.

"A cooperative relation between the State and college also impresses me as most desirable. The college of today is pre-eminently qualified to be of valuable service to the people, and should be so recognized and utilized.

"I beg to assure you that your purpose has been a great inspiration to me, and I believe that its influence on the public will be very great. I can imagine no other action which would better enable the Department of Labor and Industry to gain the real cooperation and help of the public in carrying on the vital, humane work in which we are engaged. Although your suggestion of material cooperation with the Department came to me voluntarily from you, I have become more and more convinced that it is a project well worth while and many times the value of the fund devoted to it."

DEPARTMENT OF LABOR AND INDUSTRY COOPERATING
FOR AMERICANIZATION OF IMMIGRANTS IN
PENNSYLVANIA.

Americanization of immigrants in Pennsylvania is a problem, in the solution of which the Department of Labor and Industry is actively cooperating. Statistics show that in Pennsylvania's population of 8,000,000 persons there are 1,400,000 foreign born whites over 10 years of age, thirty-three per cent of whom cannot speak English and twenty per cent of whom are illiterate.

Commissioner Jackson in an address at the National Conference on Immigration and Americanization in Philadelphia January 19th, and 20th said:

"Pennsylvania's problem for Americanization of the immigrant population is probably greater than confronts any other State. The natural resources of Pennsylvania are tremendous and the development of these resources demands a type of worker which has been mainly supplied by the rugged laborers from alien lands.

"These aliens, working in our mines, in the oil and gas sections and in the greater industrial centres that have developed closely adjacent to the originating points of these resources, must be imbued with a spirit of true Americanization and developed into true American citizens.

"Undoubtedly the three principal needs of the newly arrived immigrants are, as enunciated by the Americanization Committee:

"First, the immigrant must have ready facilities for training in our language and customs.

"Second, the immigrant must be kept safe and healthy, the conditions of his labor must be suited to his individual characteristics, and he must be protected from the unscrupulous.

"Third, he must be led into a proper understanding of the ideals of our Government and to a single, hearty patriotism for his new land.

"Pennsylvania has gone a long way toward creating the governmental machinery whereby it is possible to accomplish these beneficial ends. Thus, we now have upon our statute books laws enabling the creation of State and municipal employment agencies for the intelligent placing of men where their services will be most valuable to themselves and the State; for investigating private employment agencies, private bankers, steamship agents, padrones, labor camps and other activities under the guise of which the immigrants have unfortunately often been mulcted of their rights; for continuation

and vocational schools in which the alien may find ready assistance in learning our language and our civil and industrial methods; for accident compensation, which not only brings to him, and all labor, just returns for injury, but is also a strong tonic for improving industrial and health conditions among the workers; and a housing law which will prevent the unscrupulous landlord from herding the defenceless into unsanitary and distasteful modes of life.

"There is a special need for a very wide increase in the establishment of employment agencies. At present but \$15,000 per year has been appropriated for this work, and it is therefore more or less in the nature of an experiment to be carried on with the voluntary aid of benevolently minded and efficient organizations, as the Emergency Aid of Philadelphia, which is doing a magnificent service of this kind at the present time in this city.

"To make the system thoroughly useful, each municipality and industrial centre should have a local agency and these should be tied together by supervisory State agencies which can be used for transmitting labor from one industrial point to another. Not only should the State agencies be adequately supported in carrying out the policy of the State to aid local communities, but the local agencies should be given a fair measure of State support.

"Each of these agencies should have attached to it a trained investigator who will be able properly to protect the alien from the unscrupulous. In addition to this great system of State departments and municipal activity there should be combined the cooperative efforts of the hundreds of fine benevolent organizations which are now working over the State to the same ends.

Should Work Together.

"The time has passed when such organizations should work independently of the government and of each other. Rather the time has come when there should be an amalgamation of all such endeavors, whether governmental or voluntary, in order that a fair return may be obtained for the large expenditure of time and money involved.

"In closing permit me to suggest that one of the most potent influences for heating the melting pot would be the creation of a deeper sense of civic responsibility on the part of the leaders of our industries, professions, mercantile establishments and financial institutions."

PENNSYLVANIA IMMIGRANT STATISTICS.

Detailed statistics of the immigrants in Pennsylvania collected by H. H. Wheaton of the National Bureau of Education, assisted by the workers of the Pennsylvania Department of Labor and Industry and presented at the Americanization conference, indicated the following conditions:

Foreign-Born Whites—State of Pennsylvania.

Unable to Speak English.

10 years of age and over, ...	466,825
15 years of age and over, ...	460,045
21 years of age and over, ...	408,054

Illiterates

10 years of age and over, ...	279,668
15 years of age and over, ...	278,351
21 years of age and over (males), ...	149,592

School Attendance

10 years of age and over, ...	45,640
15 years of age and over, ...	10,804
21 years of age and over, ...	2,894

Total No. 10 years of age and over, ...	1,390,564
Unable to speak English, ...	466,825
Per cent, ...	33.6

Total No. 10 years of age and over, ...	1,390,564
Illiterates, ...	279,668
Per cent, ...	20.1

Total number attending school, ...	69,257
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School Attendance in Cities of 25,000 Population and Over.

Name.	Ten and over.	Fifteen and over.	Twenty-one and over.
Allentown, ...	162	27	8
Altoona, ...	175	40	9
Chester, ...	144	33	9
Easton, ...	99	33	5
Erie, ...	345	81	38
Harrisburg, ...	180	47	8
Hazleton, ...	196	37	7
Johnstown, ...	370	66	18
Lancaster, ...	85	25	5
McKeesport, ...	418	105	30
New Castle, ...	289	84	11
Norristown borough, ...	121	27	6
Philadelphia, ...	15,035	3,617	1,053
Pittsburgh, ...	4,407	1,241	369
Reading, ...	241	57	15
Scranton, ...	964	277	96
Shenandoah borough, ...	221	42	13
Wilkes-Barre, ...	391	96	31
Williamsport, ...	36	6	1
York, ...	32	8	4

Illiterates in Cities of 100,000 Population and Over.

Name.	Ten and over.	Fifteen and over.	Twenty-one and over.
Philadelphia, ...	47,467	47,244	33,923
Pittsburgh, ...	23,984	23,896	18,682
Scranton, ...	8,289	8,241	6,589

Unable to Speak English. In Cities of 25,000 Population and Over.

City.	10 years of age and over.
Allentown, ...	2,956
Altoona, ...	1,335
Chester, ...	2,008
Easton, ...	874
Erie, ...	4,821
Harrisburg, ...	1,088
Hazleton, ...	1,335
Johnstown, ...	8,804
Lancaster, ...	616
McKeesport, ...	4,301
New Castle, ...	3,432
Norristown Borough, ...	1,072
Philadelphia, ...	68,288
Pittsburgh, ...	38,047
Reading, ...	3,740
Scranton, ...	7,770
Shenandoah Borough, ...	4,260
Wilkes-Barre, ...	4,081
Williamsport, ...	340
York, ...	248

A Typical Pennsylvania City.

Total population, ...	38,537
Native white—Foreign or mixed parentage, ..	9,258
Native white—Foreign parentage, ...	6,054
Native White—Mixed parentage, ...	3,204
Foreign-born white.	6,673

Illiteracy Among the Foreign-born Whites.

	10 years of age and over.
Total foreign-born white population, ...	6,463
Number illiterate, ...	1,392
Per cent, ...	21.5

Citizenship Statistics of Foreign-Born Whites.

Number naturalized, ...	1,137
Number having first papers, ...	106
Number alien, ...	1,828
Unknown, ...	405

School Attendance.

10 years of age and over, ...	144
15 years of age and over, ...	33
21 years of age and over, ...	9

Inability to speak English—10 years of age and over, 2,008.

INDUSTRIAL STATISTICS OF PENNSYLVANIA PUBLIC SERVICE CORPORATIONS TO BE COMPILED.

Industrial statistics of Pennsylvania, collected and compiled by the Bureau of Statistics and Information of the Department of Labor and Industry, did not include data regarding Public Service Corporations prior to 1915.

It has been decided that industrial statistics of this Commonwealth, however, are in a sense incomplete without reports from this great branch of industry which employs hundreds of thousands of men, even though the occupation in which those workmen are engaged does not produce a tangible product.

For that reason every Public Service Corporation in Pennsylvania has been supplied with production blanks from the Department of Labor and Industry. These blanks, when filled and returned to the Department, will present statistics covering earnings, nationality and number of persons employed. The statistics will go into further detail and will cover virtually all possible data which have heretofore been published from productive industrial concerns. By this action the Department of Labor and Industry will present, in its production report of 1915, facts concerning all lines of industry operating within the Commonwealth.

FINANCIAL STATISTICS COLLECTED BY THE BUREAU OF STATISTICS AND INFORMATION OF THE DEPART- MENT OF LABOR AND INDUSTRY.

The accompanying table presents data compiled by the Bureau of Statistics and Information regarding the capital invested, value of product, total wages paid and wages paid salaried men and office force, during 1914, in 20,571 industrial establishments in Pennsylvania.

	Capital invested.	Value of product.	Total wages paid.	Wages paid salaried men and office force.
Nursery products, plants and flowers.	\$7,045,200	\$8,497,100	\$2,087,300	\$418,400
Engineering and laboratory service.	411,400	3,810,700	486,400	111,400
Building trades, ...	37,154,600	104,865,800	32,428,900	4,747,900
Chemicals and allied products, ...	220,127,600	213,663,800	35,485,200	8,059,400
Clay, glass and stone products, ...	165,389,100	99,732,300	38,820,100	5,401,600
Clothing manufacture, ...	84,259,900	151,996,800	44,408,700	2,639,800
Food and kindred products, ...	100,546,900	249,465,300	26,888,300	7,015,200
Leather and rubber goods, ...	97,924,900	163,245,200	19,672,500	3,637,700
Liquors and beverages, ...	114,225,700	73,554,400	12,022,100	4,036,500
Lumber and its remanufacture, ...	76,563,500	87,851,700	24,994,800	4,440,700
Paper and paper products, ...	40,967,000	47,509,000	10,383,200	2,209,800
Printing trades, ...	75,188,800	80,245,100	27,786,500	10,627,400
Textiles, ...	149,433,700	247,593,300	50,788,600	7,066,100
Miscellaneous products, ...	229,144,300	116,764,100	30,962,500	6,225,100
Laundries, ...	7,156,300	10,839,300	5,546,700	841,700
Metals and metal products, ...	\$93,707,000	1,510,174,800	310,898,500	52,068,800
Mines and quarries, not including coal, ...	14,016,000	12,536,200	7,098,600	\$24,900
Tobacco and its products, ...	27,656,400	64,012,100	15,163,800	1,739,300
Total, ...	\$2,340,933,300	\$3,245,857,000	\$685,412,700	\$128,111,700

BUREAU OF WORKMEN'S COMPENSATION.

Rulings adopted recently by the Workmen's Compensation Board are as follows:

Elective officers of the Commonwealth or of a county, city or any other governmental authority created by the laws of this Commonwealth; and persons paid by the Commonwealth, county, city or other governmental authority for services rendered occasionally in the administration of governmental affairs, such as jurymen, witnesses and viewers, are not employes within the meaning of the Workmen's Compensation Act of 1915.

All appointive officers and subordinates who are paid by the Commonwealth or by any county, city or other governmental authority, and all other persons performing services for the common-

wealth or other governmental agencies created by it, or for any municipal subdivision thereof, under a contract for hiring, are employes of the said Commonwealth, county, city or other governmental authority within the meaning of the act.

The owner of a threshing machine, doing work on a farm not his own, for hire, is liable to his engineer and those helpers whom he employs to run the machine; the same ruling shall apply to the owner of an ensilage cutter or any other similar machine.

INDUSTRIAL BOARD OF THE DEPARTMENT OF LABOR AND INDUSTRY

TENTATIVE DRAFT, RULES AND REGULATIONS

Relating to the

CONSTRUCTION, MAINTENANCE AND OPERATION OF CEREAL MILLS, MALTHOUSES AND GRAIN ELEVATORS IN PENNSYLVANIA.

Public hearings on these tentative rules and regulations have been held by the Industrial Board in various sections of the State.

PENALTIES.

Any person or persons who violates any of the provisions of Sections 17 and 18 of Act 226 of May 2, 1905, shall be deemed guilty of a misdemeanor, and, on conviction, shall be punished by a fine of not less than twenty-five dollars and not more than five hundred dollars, or an imprisonment in the county jail for a term not less than ten days nor more than sixty days, for each and every such violation.

Every person or persons who violates any of the provisions of Act of 267 of June 2, 1913, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officer or agent of the Department of Labor and Industry in the performance of his duties in accordance with the said rules and regulations, shall be deemed guilty of a misdemeanor; and shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars (\$100.00), or by imprisonment not exceeding one month, or both, at the discretion of the court.

TENTATIVE DRAFT.

The word "SHALL" where used is to be understood as mandatory and "SHOULD" as advisory.

Caution:—Employes shall not remove or make ineffective any safeguards while same are in use, except for the purpose of making repairs, and such safeguards so removed shall be replaced.

The provisions of all Safety Standards issued by the Industrial Board shall apply in all matters not specifically covered herein.

(a) Application. These standards shall apply to all establishments commonly known as flour, feed and cereal mills, and to malt-house elevators where such elevators are specifically referred to.

(b) New Construction. In mill buildings proper, where beams are part of a truss, the open space or room shall be ceiled below the truss. Where steel "I" beams are used, they shall be entirely enclosed so as to prevent the collection of dust. If beams support floor joists, the space between the joists on top of the beam and below the floor shall be blocked in solid with wood or other material, according to the construction. The entire construction shall be of such a character as to eliminate horizontal ledges on walls or ceilings.

(c) In existing mills, all interior openings from boiler rooms and engine rooms shall be provided on either side of the wall with approved automatic self-closing fire doors. When the boiler room or engine room is situated in the basement or cellar, the walls and ceilings shall be fireproof and shall have no openings to the mill proper except for the transmission of power, light, heat and water. In new mills, the boiler room shall connect only with the engine room and the engine room shall be separated from the mill proper by an unpierced fire wall parapeted three (3) feet, having no openings except those necessary for the transmission of power, light, heat and water.

(d) In plants hereafter erected, heating and grain tempering shall be only by steam, indirect hot air, or hot water, generated at a point separated from the milling rooms proper, so that no open flames shall come in contact with the air of the mill.

In existing plants, where heating furnaces of any description, including tempering furnaces and stoves, are located within the mill proper, the points at which fuel is charged and ashes removed shall be closed off from the air of the mill by a fireproof enclosure, vented to the outside air, the entrance to which enclosure shall be kept closed, except for ingress and egress, and notice to that effect shall be posted on the door. No unprotected flues, from such apparatus, shall be allowed to pass through the mill proper.

(e) Electric generator sets shall be either in engine room or in a room similarly cut off, as provided in Section (c). In future installations direct current motors unless located in the **engine room** shall be of the enclosed type. Existing installations of direct current motors or generators outside the engine room of mills shall be in dust-proof enclosure properly ventilated to the outer air.

(f) Illumination in all mills and in all elevators that form parts of mills shall be approved electric lighting, except that in existing mills located in a town or village where there is no electric light service, a system of lighting shall be installed which shall meet the approval of the Industrial Board. The use of safety lamps approved by the Industrial Board will be permitted.

(g) All belt conveyors for receiving grain shall be provided at the points of charge and discharge with a hood connected with an exhaust fan of sufficient capacity to remove or prevent the escape of all dust arising from the conveyor and such fan shall be kept in operation when the conveyor is in use; this rule shall not apply to the point at which a railroad car hopper discharges on to a belt conveyor.

(h) Tops of grain garnerers over scales shall be covered with wood, metal, or other impervious material, said covers to be tight fitting to prevent entirely the escape of dust. This Section also applies to malthouse elevators.

(i) Until grain is thoroughly cleaned, hoppers for weighing shall be provided with tight fitting covers of wood, metal or other material impervious to dust and with flexible dust-proof connections to the bottom of the garner if there is a garner. This section shall apply only to weighing hoppers located indoors. This section also applies to malthouse elevators.

(j) Before grain is ground or passes to grinding machines, foreign substances shall be removed by separators, or proper sieves and magnets.

(k) Dust rooms or "stive" rooms are prohibited. A fan discharging dust shall discharge either to the outer air at such points where the dust shall not re-enter the mill or adjacent buildings, or to a dust collector, and the air vent or outlet of every cyclone dust collector shall discharge to the outer air or to another dust collector. All tubular dust collectors shall be maintained in a proper state of repair as to prevent leakage of dust into the room. A fan which discharges into any dust collector shall be kept in operation at all times while the machine or machines with which it is connected are in operation. There shall be no direct connection between dust collectors and boiler rooms or incinerators. This section also applies to malthouse elevators.

(l) The piping of all exhaust systems and all ducts shall be kept tight. This rule also applies to malthouse elevators.

(m) Mills and all buildings, structure and elevators, used in connection therewith shall be kept thoroughly clean and free from dust. Dust shall be removed from floors and machinery daily, and all other parts of the mill, including fixtures, bearings, ledges, projections, side walls and ceilings, and all buildings, structures and elevators shall be cleaned and dust removed at least once a week. In every mill where more than ten (10) persons are employed at least one (1) person shall be employed whose sole duty it shall be to attend to cleaning. In cleaning, such methods shall be used as will prevent the suspension of dust in the air. This section also applies to malthouse elevators.

(n) No person in a mill shall carry or have upon his person matches, cigar lighters or contrivances or devices for lighting. Every mill shall be provided, at its entrance, with two (2) covered fire-proof receptacles, one (1) for matches and the other for lighted cigars, cigarettes or pipe contents. Each of such receptacles shall be plainly labeled to show the purpose for which it is provided. No person shall enter such mill without first depositing in the receptacle provided any and all such matter. Notice to the effect that the carrying of matches is prohibited shall be conspicuously posted.

(o) Approved two and one-half ($2\frac{1}{2}$) gallon chemical extinguishers shall be distributed throughout the building in the proportion of not less than one (1) to each two thousand five hundred (2,500) square feet of floor area; extinguishers to be placed at readily accessible points and preferably near the usual working place of workmen. Three (3) pails and a fifty (50) gallon cask of water may be considered the equivalent of one (1) two and one-half ($2\frac{1}{2}$) gallon extinguisher.

Near each electric motor or other large electric appliance, at least one (1) one-quart chemical extinguisher of carbon tetrachloride type must be provided.

This section also applies to malthouse elevators, but shall not apply to buildings equipped with approved sprinkler system.

(p) Pits for elevator boots shall be constructed of cement and have clearance of not less than three (3) feet on one side or two (2) feet on each of two sides of the boots.

(q) Employes' elevators shall be provided with an automatic stop to prevent the passenger being carried over the top.

(r) Freight elevators shall be protected as prescribed by the rules and regulations adopted by the Industrial Board.

(s) Metal cans with self-closing covers shall be provided on each floor of buildings containing machinery in which to place oiling waste or other readily combustible material.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



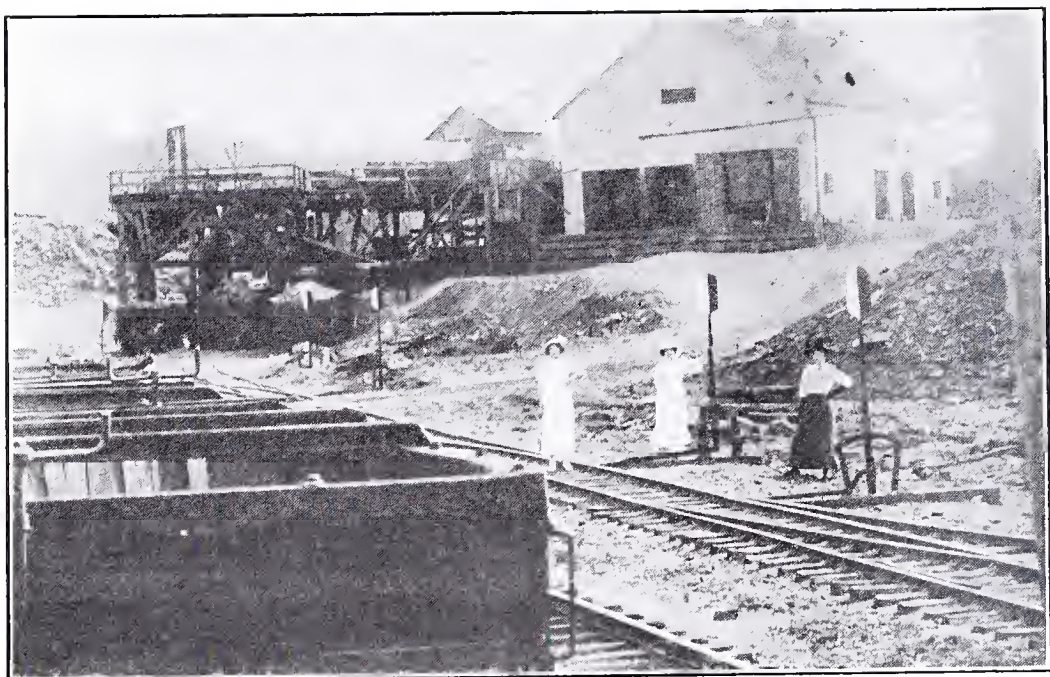
A BULLETIN OF INFORMATION FOR THE PUBLIC

MARCH, 1916

HARRISBURG, PA.
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1916

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A neglected safety valve caused this havoc. One man was killed. Two men were injured. The photographs, "before" and "after," give a vivid portrayal of a great loss from a trifling cause. Read the story on page 26.

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COOPERATION BETWEEN LABOR AND GOVERNMENT*

The day has been reached when we as a people look to the administrative arm of our Government to perform a much wider and more beneficial service than merely the collection of taxes, the enforcement of law and the protection of the people from the marauder. These latter functions still exist with as much force as in the past but added thereto is the growing and, in many respects, even more important function of aiding the people to prosperity and happiness by cooperative service with them. Our Pennsylvania Governor, Martin G. Brumbaugh, has been particularly appreciative of this phase of government and has freely consulted the people in preparing plans for making his administration of maximum cooperative helpfulness to each individual of our State, whatever may be his station in life, and wherever he may reside. It is, therefore, entirely fitting that the Chairman of your Program Committee has asked a governmental official to meet with you here in Philadelphia for the purpose of discussing ways by which your great labor organization can cooperate with the Government to promote the welfare of the people.

Permit me to point out, as examples, some of the problems which are before the Department of Labor and Industry of Pennsylvania in the solution of which you can be of valuable service. Similar problems arise in other governmental branches of the State and the United States Governments where your services can be equally well utilized to the advantage of yourselves and the people at large.

We are now, in Pennsylvania, just inaugurating a great system of accident compensation. It needs your active support in the various communities of the State. The employes everywhere should understand fully the benefits and the rights to which they are entitled under these laws. If any employe is ignorant of the facts, you should be at hand to prevent him from losing to himself and to his family the full comforts of this legislation. If there be any employers in the State who discriminate against persons who are less fortunate physically than their brothers, your influence should be made so greatly felt that the practice will stop promptly. If you fail to exercise a sufficiently potent influence in this way, you should be prepared to support legislation which would absolutely eradicate such practice. On the other hand, you are particularly well situated to

*Extracts from talk of John Price Jackson, Pennsylvania Commissioner of Labor and Industry, at Industrial Relations Day before the Central Labor Union of Philadelphia and vicinity on Sunday afternoon, February 13, 1916.

prevent malingering or other misuse of this system by unfair employes. There are a few men among us, we are forced to admit, of unjust, conscienceless, and low human character, distributed in the ranks of both employers and employes. Luckily, for the nation, the great bulk of our people are honest and law-abiding.

Closely allied to the subject of accident compensation is the problem of the prevention of industrial accidents and sickness. Reports, being received now at Harrisburg indicate that approximately 300,000 workers are injured, per year, more or less seriously, and that several thousands are killed. This record represents a heart-rending cost of suffering to the injured and their dependents. It also represents a tax of a great many millions of dollars upon the people—a futile waste, which, if it could be saved, would probably pay nearly if not all the annual operating expenses of the State Government. A large proportion of this suffering and financial loss can be avoided if you and the employers and the State Government renew energetically the campaign already begun to see that all dangerous conditions are, as far as possible, removed; that safety and health organizations are established everywhere in our factories and work places; and that such organizations are kept energetically at the task of studying and making known methods for improving the individual carefulness of a man for his own health and safety and for that of his neighbor. Here again we find now and then an employer who will not voluntarily provide satisfactory conditions. Your influence should go far toward forcing him to the right position and can, when additional persuasion is necessary, be made effective by the aid of State Government. We also have an element of employes who are reckless and disregard safeguards which are prepared for them and their fellows. You can, in your Central Labor Unions and elsewhere, do the invaluable duty of bringing such workers to a sense of their responsibility to themselves, their families, and their fellow workers.

You have been in the past of cooperative service to the Industrial Board of the Department of Labor and Industry in its work of drawing up industrial standards of safety and health. The Board has been calling together voluntary committees of experts from the ranks of employes, employers and elsewhere. These committees, numbering in the aggregate up to the present time, hundreds of skilled men, have either completed or are working upon recommendations for adoption by the Board, which have already proved and are destined in the future to prove of great service in bettering the health, safety and happiness of the worker, and the prosperity of industry as a whole. You can well afford to continue this work by seeing to it that every committee of this kind which may be appointed has attached to it a quota of your most competent men.

We have two labor laws in Pennsylvania, with others of a minor character on the statute books of the Commonwealth, which deal particularly with hours of labor, namely: The Woman's Law, which is intended to guard the health of women so that the future generations may be strong and healthy; and the Child Labor Law, which is not only arranged to protect the health of the children and thus insure robust manhood, but also to develop their minds to a keen appreciation of their responsibilities. Much can be done by you through keeping the advantages and values of these laws in the minds of the people, it being well known that where the people understand and believe in laws they, as a whole, obey them and insist upon their obedience by others. Here again, where infractions occur by those of the conscienceless type, your great influence can usually correct the wrong and where that is impossible, an appeal to the Government will undoubtedly accomplish the desired result.

In connection with the Child Labor Law is the system of continuation schools. Every child employed between fourteen and sixteen must attend these schools at least eight hours per week. Properly established and carried on, they will enable the child to apply improved thought and judgment to his industrial activities and business. This will result in not only greatly increasing his earning capacity and therefore happiness in future years, but through development of higher skill and intelligence will also come greater prosperity to industry and wealth to the people of the State as a whole. You, in your local communities, can make known the benefits of this law by taking an active part in the establishment of these schools and by aiding in directing them in such a way as to accomplish the results desired. In this you will be cooperating most serviceably with both the State Departments of Labor and Industry and Public Instruction. It is well to remind you here that schools of this character and purpose have already been thoroughly studied and approved by the American Federation of Labor.

One of the greatest useless human wastes in this Commonwealth results from the lack of a systematic method whereby those who are able to work and want to work can be quickly placed in positions for which they are fitted. At present the Department of Labor and Industry has established four free employment agencies located respectively in Philadelphia, Harrisburg, Johnstown and Pittsburgh. They are intended to be the beginning of a great system of State aided, local free employment agencies which will cover all the industrial centres of the State. These local agencies will be tied together by State supervision, with the State as a transfer agent. Thus those out of employment in one community can be quickly transferred to places where their services will be most needed elsewhere.

You can be of material service by directing those in need of work to these agencies, in order that the habit may be established of making use of this arm of the Government for the service of the people. You can also aid the Department by helping to protect the ignorant worker or the one who cannot speak the English language from being imposed upon, cheated, or treated unjustly by conscienceless men who, here and there, have gone into the private employment business with wrong motives; or by padrones, steamship agents, private bankers, etc., of a similar character. We have found a material amount of this kind of injustice in Pennsylvania. You can also use your influence to see that labor camps for construction work are maintained sanitary and healthful, or, if necessary, call upon the power of the Department for improving such conditions. Thus you will not only help to protect the workers but will also improve the business of reputable persons engaged in those businesses. The public employment agencies referred to are so arranged that they shall not be used unfairly for obtaining employes in a plant when there is a strike or lock out.

You can aid the man who fails to receive his pay at the legally appointed times, or who is for any reason illegally prevented from getting the pay, or balance that may be due him, by aiding him in appealing to the courts.

Probably the greatest problem before us is that of working out methods for the settlement of labor disputes without resort to strikes or lockouts. Combined with this is the even broader problem of so modifying the organization of industry that the causes of fierce antagonisms which often now arise between labor and capital may be eliminated. It is probable that none of us are prepared at present to offer a panacea for these ills, but I believe that most of us are convinced that with the right attitude on the part of the Government, employes, and employers, we will gradually work toward a solution of the problems. At present the governmental mediator usually proves of service to both sides of the controversy, even though once in a while he may meet unsatisfactory conditions which are insurmountable. You can help to develop the usefulness of such mediators by maintaining a helpful spirit of cooperation with them. The use of mediators is probably one of the early preliminary steps towards obtaining a knowledge of how to reorganize our attitude to industry in order to bring the final solution; this, however, can be nothing more than a preliminary step, as the solution of the problem must include the development of normally closer relations between labor and capital and an arrangement which will bring the best interests of the two sides more fully into harmony. There are signs that this problem, so necessary to our industrial success, is being practically

considered. Here and there establishments are so organized that apparently the worker and the employer are on such terms of harmony that their friendly and mutually helpful relations could with difficulty be disturbed. I believe that the Federation of Labor can afford to give this project continued careful consideration and debate. A primary element of the problem is of course that relating to the distribution of profits. We as a people believe that the leader in industry and business should be most generously compensated for his competency and mental and physical power, but we believe that he should earn his returns as fairly as does the man who works with his hands. Our National and State legislation with regard to public utilities shows that we will not continuously stand for either unfair or unearned aggrandizement by the individual, corporation, or association. On the other side of this problem is the fact that we do not desire to injure the characteristics of individual initiative, industry and self-reliance among our people: so we find the problem a most complex one, and one to be handled with great care and magnanimity.

The great bulk of our people undoubtedly believe in the rights of labor to organize. A great corporation is, in its essence, the simple pooling of the savings of hundreds, or thousands, or tens of thousands of men, in order that the large resultant sum of money and credit may be made to work for them more economically and profitably. This is proper and to the economic advantage of the country. Likewise, employes organize and pool their labor resources in order that they may thereby have more power to obtain for their services an adequate return. The outlook is that both corporate associations and labor associations will in the future become stronger and stronger until a point is reached when a clash between the two would mean a terrific cataclysm for the country. It therefore behooves you and the representatives of the employers as suggested earlier to join earnestly with the Government in taking hold of this great problem of perfecting friendly and just relations between capital and labor. You should use your influence to see to it that not only is capital under such governmental supervision as will protect the interest of all and not permit its misuse by the unscrupulous, but that the labor organizations are also responsible to the Government so far as is essential to fair dealing. This broad-minded attitude toward the responsibilities of associations of employers and employes is particularly essential, as with the present rapid growth of both it is evident that they will be the potent factors of the future in shaping our industrial future, and therefore of our National and State progress or retardation.

The few examples of problems named are but a small fraction of those which you can aid the State Government in solving.

In behalf of the Governor of the Commonwealth of Pennsylvania, and for the Department of Labor and Industry which I represent, I earnestly urge that you give the problems I have named careful thought and make available to us the value of your judgment, and furnish your active support to the end that the work for which we are responsible may be performed justly, effectively, and in the interest of all the people.

OCCUPATIONS INVOLVING EXPOSURE TO EXTREMES OF TEMPERATURE, EXCESSIVE MOISTURE AND ABNORMAL AIR PRESSURE

The physical welfare and industrial efficiency of individuals are largely influenced by the condition of the surrounding temperature. Its effects vary considerably according to the dryness, moisture and motion of the air, sudden changes of temperature, and the duration of exposure.

The human body possesses an automatic heat regulating station in the brain, by which the production and loss of heat is regulated so as to maintain a uniform temperature at 98.2° F. In this process the skin plays a most important part. Whenever heat strikes the skin, afferent impulses are carried to this heat regulating centre in the nervous system, from which efferent impulses are carried to the nerves of the cutaneous vessels and the muscular fibres. These vessels dilate, and thus increase the blood supply to the skin, more blood comes to the surface of the body, and there is a corresponding loss of heat by conduction and radiation. On the other hand, if cold strikes the skin, the cutaneous vessels contract, less blood comes to the body surface, and the body heat is conserved. Under the influence of heat, the sweat glands in the skin are stimulated, excrete more sweat, which is evaporated and this dissipates still more heat. This profuse perspiration, if long continued, deprives the blood of certain constituents, takes from the internal organs their proper distribution of the blood supply. This lowers the tone and nutrition of the vital organs. Vital resistance is lowered and the system becomes more susceptible to disease.

Thus, by means of its heat regulating centre, the human body strives to adopt itself to extremes of heat and cold; this mechanism is liable to slip a cog, perform its functions erratically, or become paralyzed, if the demands upon it are too frequent or prolonged. It is particularly sensitive to sudden changes of temperature. These sudden changes may irritate locally, and induce disease in the parts exposed or by reflex irritation set up marked circulatory mischief in the internal organs.

Exposure to extremes of heat or sudden changes in temperature are injurious and predispose to many diseases.

Hot, moist, still air checks evaporation of moisture from the skin, and taxes the heat regulating mechanism of the body. The blood, which under normal conditions supplies the brain and muscles, is consigned to the relaxed blood vessels in the skin, and general languor ensues.

The classes of workmen who are subjected to extreme dry heat are stokers, puddlers, foundrymen, glass blowers, potters, bakers, cooks, roofers, blacksmiths, firemen, electric furnace workers and workers in asphalt. As a result of their occupation, workers in these trades are very liable to suffer from prostrations, (heat exhaustion and sunstroke), painful muscular cramps in the legs and abdomen, rheumatism, bronchitis and chronic Bright's disease. The eye, when subjected to extreme heat, is liable to develop cataract, retinitis and conjunctivitis.

Exposure to excessive cold is involved in handling and manufacturing ice and in working in cold storage plants. Neuritis, rheumatism, and nephritis are common ailments among the workers in these occupations. Workers in cold processes should be adequately clothed to maintain the warmth of the body, and they should have enough exercise to stimulate the circulation.

Moreover, exposure to conditions of heat alternating with cold, as going in and out of cold storage plants, and bake ovens, often excites an attack of colic and diarrhoea; prolonged exposure to these conditions causes rheumatism and nephritis. The colic usually occurs in the summer time, after a hearty meal or after drinking a large quantity of ice water.

All sorts of cold drafts in the winter are often encountered around furnaces. In an overheated state, the workmen often retreat to an unprotected part of the workroom to rest without additional clothing. Such exposure favors the onset of rheumatism, pneumonia, and Bright's disease.

The effects of both heat and cold are intensified by excessive humidity in the air.

The atmosphere in which we move and live, always contains a certain amount of watery vapor. Its presence is due to the fact that water evaporates at all temperatures, so that a slow but invisible escape of watery vapor is taking place from the earth's surface at all times into the air space, which encircles the globe. The amount of watery vapor, which the air can take up varies with the temperature of the air. Thus, at 32°F. a cubic foot of air contains 2.13 grains of water, and at 100°F. it contains 19.84 grains. Expressed mathematically, it can be said that as the temperature rises in arithmetical progression, the power of the air to retain moisture increases in a geometrical series with a ratio of 2. When the air contains the full amount of watery vapor for the given temperature, it is said to be saturated; and in proportion as it is more or less removed from this point of saturation, is air said to be dry or moist. As a rule, the atmosphere contains 50 to 75% of the amount of moisture required for complete saturation. This is known as the relative humidity, and if it varies much above or below this limit, the air becomes either unpleasantly moist or dry. This relative humidity is of especial hygienic importance, because of its effect upon the vapory exhalations from the lungs and skin. The average daily amount of water removed, from the skin equals $2\frac{1}{2}$ lbs., and that from the lungs equals 10 oz.

Occupations involving exposure to excessive moisture are obviously detrimental to health. If in addition thereto, variations in temperature are added, the hazard becomes greater. The power of resistance is lowered and a predisposition to catarrhal and rheumatic ailments is established.

When the air is damp, the evaporation of moisture from the skin and lungs is impeded, because damp air has but little drying power. Under normal conditions, much heat in the body is made latent by the evaporation of the perspiration. This is the chief means of cooling the body. Therefore, when the air is very moist and hot, the humidity increases the effects of the heat, the temperature of the blood is increased, and all the injurious effects of high temperature may be experienced. Heat and moisture check the perspiration and embarrass the breathing, the kidneys are overtaxed and the nervous system depressed. The condition may become so intensified that the body temperature may exceed the normal, and severe intoxication result.

Examples of this type of exposure are found among workers in tunnels, mines, laundries, tanneries, dye works, flax mills, hothouses, and in all occupations associated with the liberation of large amounts of steam.

If the air is cold and damp, the moisture again causes mischief by abstracting too much heat from the body, which tends to lower the body temperature. This lowers the vital resistance, and favors the development of pulmonary diseases, neuralgic and rheumatic affections.

Excessive humidity, therefore, aggravates the ill effects of both heat and cold.

Moreover, excessive dryness of the atmosphere in the workrooms during the season of artificial heating of buildings, obtains in a large number of industrial establishments. The relative humidity is low. This excessive dryness does harm because it increases the evaporation of watery vapors from the skin and mucous surfaces of the body. This dries the skin and irritates the mouth, eyes and respiratory passages and sets up catarrhal inflammations.

The most agreeable temperature for the average healthy adult varies between 65° and 75°F., and from experience, it has been found that a relative humidity varying from 65% to 75% is most conducive to health. These standards should be maintained whenever it is possible to do so.

In nearly all trade processes associated with high temperatures, the heat can be kept away from the workmen by the adoption of proper appliances for handling and transporting heated materials, the use of screens, and shields, asbestos coverings, water-cooled furnace doors, air blasts, fans and water sprays.

The humidity conditions can be controlled by the use of humidifiers, air exchangers and fans, and these in turn can be regulated by reliable thermometers and hygrometers.

Those required to work in water and dampness should be provided with rubber boots, gloves and aprons and proper clothing, in addition to all mechanical contrivances adapted to the efficient removal of the water and steam.

Wherever the hazards from heat and moisture exist, clothing that protects from heat and favors the evaporation of the moisture should be worn; there should be frequent short periods of rest, and adequate bathing facilities including the shower bath.

Specific Diseases Resulting from Occupational Exposure to High Temperatures

Excessive heat produces definite and serious effects upon the human body. These effects may be divided into two classes, which are easily distinguished from each other. Each class exhibits a well

defined group of symptoms or syndrome, which is covered by the terms Sunstroke and Heat Exhaustion.

Sunstroke.—This is a state of high fever induced by exposure to excessive heat; it occurs most frequently in the summer time to those exposed to the direct rays of the sun; it may also occur among those exposed to high temperature within doors, as in sugar refineries, fire and boiler rooms, laundries, etc.

The fever is due to a disturbance of the heat regulating centres in the brain, so that more heat is produced than normal, and less heat is thrown off.

Symptoms. After a few days of extreme heat and humidity, the patient complains of headache and general weakness. There may be intense headache, dizziness, oppression, nausea and vomiting, followed by unconsciousness, with muttering delirium and intense restlessness. The face is flushed, the skin hot and dry, and the body temperature is high, usually considerably above 100° . The breathing is labored and the pulse rapid.

In fatal cases, the pulse becomes more frequent and irregular, and the stupor rapidly deepens.

Recovery may be complete, but there frequently results loss of mental concentration, and various kinds of insanities have followed in about 4% of the most severe cases.

Treatment. The first aid treatment consists in removing the patient from the heated atmosphere, and applying cold in any form available, in order to reduce the fever. Even baths containing ice may be required to bring the body temperature to normal, which is necessary in order to save the patient. Stimulating treatment should also be employed under the direction of a doctor.

Heat Exhaustion.—This condition usually affects old or feeble workmen. It is due to causes similar to those producing sunstroke.

The theory is that the heat paralyzes that part of the heat centre in the brain which controls the output of the body heat, this is dissipated faster than it is produced. Hence the body temperature is subnormal or only slightly elevated.

Symptoms. The face is pale and the skin bathed in cold perspiration; the pulse is feeble and sometimes very slow. There is marked muscular prostration with a tendency to dizziness, nausea and vomiting, and fainting.

The victim of heat exhaustion becomes intolerant to subsequent exposure to heat, and early shows signs of physical debility. With the subnormal temperature there is usually associated ague-like paroxysms of chills, and the patient trembles from head to foot, even when the surrounding temperature is high.

Treatment. The treatment in these cases is the reverse of that required in sunstrokes. The patient should be wrapped immediately in blankets or in the clothes of his coworkers, and heat supplied to the body. This may be accomplished by placing between the coverings of the patient, old bottles filled with hot water or towels wet with hot water, which can usually be obtained from the boiler. These appliances should be placed at the extremities and on each side of the trunk, and guarded by sufficient wrapping, so as not to burn the patient. Hot water may also be sipped like hot tea. As stimulation is early indicated, the doctor should be summoned at once.

Effects of Compressed Air—Caisson Disease.

In certain industries, as tunnelling, deep mining and diving, work must be done in caissons under compressed air. The workmen perform laborious work under an atmospheric pressure of 30 to 45 lbs. (2 to 3 atmospheres).

The workmen enter successive air locks, in which the atmospheric pressure is slowly increased. Under these conditions, an increased quantity of oxygen and nitrogen is absorbed into the blood, the quantity absorbed being in proportion to the increase of pressure. These gases are distributed by the blood to the various organs.

Under rapid decompression, the nitrogen gas forms bubbles in the blood, which, in the form of emboli, block up the capillaries, and by cutting off the blood supply, produce the various symptoms of compressed air illness, which are mainly referable to the spinal cord and its nerves, because the blood vessels supplying these structures are confined within unyielding bony structures.

Symptoms manifest themselves either immediately or sometimes within an hour after the workmen leave the tunnel or caisson. The onset is usually very sudden with prostration, vertigo and pain in the back and legs (the bends or staggers), followed by complete paralysis of the legs, and occasionally of the arms. Sometimes there is a painful constriction of the chest—the “chokes.” Unfortunately, more or less permanent paralysis occurs in many cases. A characteristic feature of the disease is the great variability in the manner of occurrence of the symptoms and of the response to treatment.

These symptoms may be prevented by slow decompression, which must be slow enough to allow the nitrogen absorbed in the blood to escape from the lungs. A uniform decompression at the rate of one minute for each two pounds of pressure has been recommended by Dr. F. L. Keays, whose experience covered over 3,000 cases in connection with the Pennsylvania tubes in New York.

FIRE HAZARDS FROM ELECTRICITY

Electricity, today, is such a common thing and is being used so universally that too frequently people who use it forget that it will exert its powers destructively if not given the opportunity to work in the right manner. The old adage, "Familiarity breeds contempt," holds good particularly in this respect. Too many property owners think that, after electric wiring and apparatus for using electric current have been installed, no more attention need be paid to them, that they will go along working the same, year after year, and that there is no danger from deterioration or wear. They fail to consider that wear which takes place with time in everything else also occurs in electrical installations. Continual jarring of buildings, sagging of foundations, changes of heat and cold, falling objects, dust, fumes, or gases may in part be responsible for a large proportion of general wear and tear without consideration of any mechanical or accidental injuries which may occur from time to time, and thus be the agency by which gradual changes are made from the original safe condition.

Then, too, electrical equipments have been installed, which were not of approved type, or which were not made safe originally, due either to the inexperience of the workmen, or to a desire to skimp and save money. This article has been prepared with the idea of calling attention to some of the conditions which have been observed and which will, in time cause fires if not corrected. It would be manifestly impossible within the scope of such a short article to touch on all ways in which fires could occur from electrical apparatus. An endeavor will be made, however, to bring to the reader's attention all common causes and all exceptional causes where examples can be given and the lesson to be gained thereby, is plain and practical. The different parts of electrical installations and their respective hazards will be noted in detail.

Switch Boxes

All switch boxes should be lined with incombustible material. Preferably, they should be constructed throughout of this grade of material. Too frequently, in buildings, wooden boxes are found lined with asbestos. This is, at best, a makeshift and in some cases the combustible wooden door is not covered on the inside with asbestos. A case in question is recalled. One evening the janitor in a Y. M. C. A. building was engaged in polishing metal work and dusting. For some unaccountable reason he opened the switch box

which controlled the lights in the building and placed the metal polish can on the ledge therein. A short time later he unconsciously pushed shut the door of the box which had been standing partly open. Immediately there was a flash. The metal can had caused a short circuit and in the attempt to pull the can away with the dusting cloth, this cloth caught fire. Attached to the inside of the door was a piece of paper giving the numbers of the switches and the location of the lights which each switch controlled. This also caught fire, but owing to the close proximity of a fire extinguisher, there was no appreciable damage. The possibilities of what might have occurred are, however, worthy of consideration. Suppose the janitor had not pushed the door shut, had been called suddenly away to other work and had left the can inside the switch box. That night, while the twenty to fifty lodgers in the third and fourth floors above were sound asleep, something—the wind, the cat after a mouse, or some other agency—might have pushed the door a little so that the can would have been moved slightly and the same incident would have occurred. There would not, however, have been anyone around to put out the fire or remove the can. The arc formed would have eventually melted the can and ignited the inflammable polishing liquid therein. A fire would thus have been started immediately under the stairways by which the majority of the occupants would have tried to escape. In the confusion of smoke and flame and owing to the fact that they had been awakened suddenly, serious loss of life might have resulted. Although this little incident did not cause much damage, it shows that the following suggestions should be observed:

All switch boxes should be locked and the key given to some responsible person.

All switch boxes, including the doors, should be lined with some incombustible material; preferably they should be constructed of fireproof material.

No metal objects, cans, etc., or any paper or other combustible material should be allowed inside these boxes.

Only nonarcing fuses should be used in switch or fuse boxes.

Observations of switch boxes in factories have frequently shown them to be depositories of pieces of paper. Copper wire is sometimes used to replace burnt out fuses; and even in some cases coils of wire are so placed that a slight jar of the box would throw the wire against the main feed wires and thus cause a short circuit.

Notwithstanding the fact that so much is known concerning the danger of placing knife switches so that they can be jarred closed, would-be electricians are still found placing switches in this position in switch boxes. All knife switches should be placed so that the

handle is hanging down when the circuit is open. To close the circuit the handle is lifted and pushed in to form a contact. In many cases knife switches are found which open laterally. This condition is not particularly dangerous, but the practice of placing them in this position should be discouraged.

Extension Cords and Lights

The extension cord, while a great convenience and in some cases a necessity, is, nevertheless, a constant source of danger. Too frequently it is found twisted around nails or other metal objects in a room. No thought has been given to the fact that continual contact with a metal object together with frequent movements due to handling or jars to the building will cause gradual wear to the insulation on the wires. When the insulation breaks or is worn through a short circuit takes place with its accompanying arc, and, if anything combustible is near, a fire starts.

Oil soaked extension cords in machine shops have been seen lying in sawdust on cement floors where the operator could hardly help but walk or stumble over them every few minutes. When the operator left at night the current might have been turned off at the lamp but owing to the voltage on the wires at all times, the danger of short-circuiting was ever present.

In many cases extension cords are seen clinched to wooden partitions by means of a bent wire nail which has even been forced into the insulation of the wire by the force of the hammer blow.

Such careless use of extension lights is inexcusable. Whenever there is need for a permanent light, proper wiring should be installed and a light attached. If it is necessary to hang up extension cords, they should be attached to hangers with a piece of cord or some other nonconducting material. Extension lights are sometimes necessary, however, and in order to avoid the danger of having loose wires which have current in them and are thus liable to be come short-circuited, although the light at the end is shut off, it is advised that no means be provided for turning them off at the light itself. The switch should be located at the junction where the current is taken from the permanent wiring so there will be no current in the loose wires whenever that particular light has been turned off.

Flexible cords connected to irons, heating, or other movable electrical apparatus should be treated in the same way. In addition it is recommended that a red light be connected with the switch in such a manner that whenever the current is turned on in the iron or the other apparatus, the red light would be burning and that no current could enter the apparatus, unless that light be burning. In

this way, a piece of apparatus of this type would not likely be left turned on when an employe leaves work for the day or when called away suddenly. Even if this were done by the operator, the red danger signal would be there to warn the watchman or some one else of the danger. This danger would be that the piece of apparatus might heat up sufficiently to burn off the insulation and thus cause short-circuiting.

If trouble, as pointed out, occurs when any person is near, the fire, so caused, could readily be put out in its incipency. Accordingly, all preventive measures must be aimed to prevent such things happening when persons are not around. This can be done with reference to extension wires by having no current in them, unless they are in use. The switch arrangement noted above will accomplish this, and the lighted lamp will indicate the danger.

Wiring

A frequent cause given for fires is "crossed wires". In many cases this cause may have been given because no other cause could be determined. Too often, no doubt, it is used unadvisedly, yet the fact that it is given so often, shows that there must be some reason for the belief that it is a frequent cause of fires. Inspection of wiring in general bears out this opinion. Open wiring, although at present never installed by reputable electricians, was used for many years and is the type of wiring found in the majority of installations. Only in installations of recent date is conduit wiring found. This is the only safe and approved method of wiring at the present time and in the future should alone be used.

The great danger from open wiring arises chiefly when it is old and no recent care or attention has been given to it. The screws in the wooden bridges or porcelain knobs which hold it in position become loosened and allow the wires to sag so that they touch one another or rub against something which may act as a conductor or cause a short circuit. Gradually the insulation is worn through and finally a short circuit occurs and a fire results. All wiring should accordingly be carefully examined and *tested* frequently to see that it is being held rigidly in position. Wiring of the open type should be replaced by wiring in conduit as time and money are available. Wherever wires go through the walls of a building, joists or partitions, or wherever they cross other wires or are in danger of being rubbed or chafed, each wire should be encased in a porcelain conduit. All connections should be insulated by a proper amount of tape. An uninsulated or bare wire should not be tolerated under any condi-

tion. Wherever wires enter a building or room they should be carefully examined and tested to see that there is no sagging or touching of one another and all terminal connections should be likewise examined and tested.

Loose connections have gradually caused increased temperature until insulation has caught fire and this in turn ignited nearby combustible material. A case of this kind occurred in a warehouse. For some time previous to the actual discovery of the cause itself, a smell of smoke was noticed in this building. Efforts to locate the cause of the odor were of no avail until just before the warehouse was to have been closed for the night. On the last round of inspection the foreman happened to look up at the ceiling in one corner of the building where the blow-out fuses for the lighting system were located. He noticed a low light. Investigation disclosed the fact that a connection of the wiring which had been jarred loose by the continual passage of trains on the outside of the building made such a poor contact that sufficient resistance was caused to gradually heat up the connection. The wood on which it was fastened was charred and finally the heat was so great that it had become ignited. If this had occurred a few hours later no doubt the warehouse would have been burned and it would have been thought that "someone set it on fire because there was no fire around the building all day long." As a matter of fact electric wiring with current in it is a constant source of danger in any building where it is installed. It should be kept under observation at all times. A switch located outside of each building and so arranged to cut the current off outside of the building at night or whenever there is no use for current would prevent all fires, due to defective wiring, from occurring in buildings at night or when no persons are in them to detect and put out fires started in this manner.

HINTS FOR SAFETY OF EMPLOYEES

Four additional Safety First pamphlets have been issued by the Department of Labor and Industry and are now available for general distribution. These folders of the "Timely Hints" series are for safety from fire; for electricians; for woodworkers; and for repairmen. The text of each folder is as follows:

TIMELY HINTS
on
SAFETY FROM FIRE
for
OWNERS OR MANAGERS OF INSTITUTIONS AND
ESTABLISHMENTS

The economic loss of life and property which occurs annually from fire is largely preventable. Investigations have proved that almost all fires involving such loss in factories and public institutions are due to carelessness and to the lack of taking proper precautions.

Careful consideration of the following suggestions and prompt removal of any bad conditions noted in your own establishment will help to prevent the occurrence of fires and the attendant possible loss of life and property.

Loss of life during fires *has been caused* by some or all of the following conditions:

Inadequate Means of Escape

At least two ways of escape should be provided for employes or occupants of every room.

Number and size of exits and stairs should be sufficient to accommodate number of occupants of each floor comfortably and without crowding.

Neglect of Holding Efficient Fire Drills

Practice drills should be held at irregular times but at least once every month. Previous notice that a practice drill is to be held lessens its effectiveness and may cause a panic at the time of an actual fire.

Proper leaders with an efficient organization and prompt obedience to the alarm are necessary.

Blocked Exits or Fire Escapes

Locked doors or inward swinging ones have delayed escape just long enough to allow smoke and flame to be able to work their deadly destructive power. Fire escapes were rendered useless owing to

their improper location or lack of protection by means of wire glass windows or fireproof doors. Smoke and flame from unprotected openings at lower levels made such fire escapes impassable.

Lack of Suitable Fire Alarm System

The first few minutes at the beginning of a fire are the vital ones and the time when escape can be made. Occupants on the upper floors of a factory filled with working machinery or of large buildings or institutions cannot hear or know immediately of a fire occurring on a lower floor unless there is a proper fire alarm signal. A delay until they smell smoke will no doubt mean smoke filled exits and the death of these persons.

Unsafe Handling and Storage of Inflammable and Explosive Materials

The use of material of this kind without the exercise of any safety precautions regarding use of safety containers or amount of material left exposed to danger of ignition from a spark or spontaneous combustion is inexcusable.

Lack of Fire Fighting Apparatus or Knowledge of How to Use It

The time to put out a fire is when it begins. Fire extinguishers should be plentifully supplied and prominently located. They should also be inspected frequently and responsible persons should be acquainted with their use.

Coroner's juries and other official investigating bodies have proved the above conditions to have been responsible for loss of life from fire. In many cases criminal proceedings have followed such reports. Knowing these facts can you afford to allow such conditions to exist in your own establishment?

As a means of checking the rapid spread of smoke and flame and thereby increasing the probability of confining fire to small areas, the following methods of building construction have proved their worth in the preservation of life and the protection of property:

Fire Walls with Fireproof Doors that Close Without Fail

They allow lateral escape from fires and prevent spread of flames.

Metal Window and Door Frames and Metal Sash with Wire Glass Therein

They prevent fire from entering a building from adjacent structures and when used in elevator shaftways or stairways, they prevent the rapid spread of fire and smoke.

Fire Towers or Fireproofed Stairways

They afford sure means of escape to occupants and safe means of entrance to fire fighters.

The automatic sprinkler, when properly installed and kept in working condition, has so effectively shown its ability to put out fires that no property owner can afford to be without it. No serious loss of life from fire has been recorded in any building in which an automatic sprinkler system was in operation.

TIMELY HINTS FOR ELECTRICIANS

An electrician who is not familiar with or does not follow accepted standard practice in his repair and installation work is a constant menace to the safety of any establishment and its employes.

Shield your eyes from electric arcs or flashes. This kind of light frequently causes temporary blindness and in some cases ruins the eyesight. If you ever become so affected, consult the plant doctor or your own physician at once.

Small cuts, bruises or burns should receive treatment immediately and be protected from dirt or mechanical injury. Blood poisoning may set in and must be guarded against.

Keep your eyes on your hand when reaching for electric switches. Otherwise you may touch the "juice."

Before working on electric machines *lock* the service line *switch* open and place the key in your pocket. No person can then turn on the current with fatal results to yourself. This has often occurred.

Screw drivers, pliers, and all other handy tools should have insulated handles.

Immediately stop any abuse or misuse of electrical apparatus.

Never work on live circuits unless it is absolutely necessary. If you must work on such circuits, use all the safety devices and methods possible.

Treat all wires as "live" until you are absolutely sure they are "dead".

Unsafe or improperly working electrical apparatus should be immediately shut off and reported to the proper authorities.

In working overhead be careful to place tools so they cannot fall on persons underneath.

If working on ladders or scaffolds see that they are substantially built. If they are not, you may be the sufferer.

Use your safety belt whenever possible. It may be your "life preserver."

Never overload a circuit or use a fuse of too great capacity. Overheating of conductors may occur and the possibility of a fire is thus increased.

Study regulations for the proper installation of electrical apparatus. Never install wiring or other electrical apparatus which is not strictly in accordance with such rules. They have been formulated to prevent fires and accidents.

Do not leave soldering torches burning unless you are present. Thoughtlessness in this matter on your part may cause considerable damage.

See that all combustible material is removed from places where a spark from electrical machinery or apparatus could ignite it.

Care and Caution in Your Work are Necessary for Your Own Safety and for That of Your Fellow Employee

Every electrician should know how to render first aid to a person who has been rendered unconscious from electric shock.

Resuscitation methods are not difficult to learn. If you know them, you may be able to save some one's life in a case of emergency.

Serious and fatal accidents have happened to electricians from the following causes:

Touching live wires.

Breaking of weak ladders or scaffolds,

Unauthorized persons throwing in a switch,

Being hit by falling material,

Failure of hoisting apparatus,

Being caught in machinery.

Play safe. Regret for having done work carelessly or improperly will be poor consolation to you if you become injured.

TIMELY HINTS FOR WOODWORKERS

Health

Insufficient light lessens the amount of work you can put out, keeps you from seeing dangerous places and puts a strain on your eyes.

Too much light shining directly into your eyes causes headaches, eyestrain and weakened eyesight.

Plenty of light, either natural or artificial, shaded so as to keep the glare from your eyes allows you to turn out better work and protects your sight.

Dust in the air means dust in your lungs as well as on the floor. Any dust that you breathe irritates your lungs and makes you more susceptible to tuberculosis. See that all dust removing devices are working properly.

People are more apt to spit on a dusty, dirty floor than on a clean one. The germs of tuberculosis expectorated on the floor will surely be kicked up with the dust and you will breathe them into your lungs. Insist upon everybody who must spit using some kind of cuspidor that is cleaned frequently.

Have splinters in your hands or other parts of your body removed promptly and all open wounds dressed at once. It is the small injuries that are most frequently followed by blood poisoning, simply because they seem too trifling to need careful attention.

Fire Prevention and Protection

A woodworking plant is constantly in danger of taking fire. A fire will throw you out of a job. Do everything to safeguard the plant from fire. Learn location of fire fighting apparatus, maintain it in proper condition, and know how to use it.

Smoking at work is always dangerous. Smoking in a woodworking plant is foolhardy. Piles of sawdust, especially if slightly damp, are apt to take fire spontaneously. Do not add to the risk by giving any opportunity for a spark to fall among such material.

Your employer should provide metal cans for inflammable rubbish such as oily waste and greasy lunch papers. They are no protection, however, unless you use them.

Safety

Material scattered over the floor interferes with your work and often causes serious accidents due to the tripping and falling of workmen. See that all stock and finished products are piled neatly in their proper places.

Saw guards are provided for your safety. Lying on the floor or otherwise removed from the saw they will not save fingers or hands.

The use of a splitter or divider will prevent a kick back. Do not operate your saw unless such device is in position. Kick backs have often caused fatal accidents to workmen.

Do not remove guards from saws, belts or gears while machinery is in motion. Be sure that all guards are in place before machinery is started.

Wrestling, scuffling, pushing and jostling have no place around machinery in motion.

It is to your employer's advantage to guard his machinery.

It is to your advantage to see that the guards are always used.

No compensation in dollars and cents required by the State laws can ever actually repay you for the loss of a finger. Can you then afford to lose a hand or an arm?

TIMELY HINTS FOR REPAIRMEN

Repair work is dangerous. Usual operating conditions are interrupted. The work must frequently be done in a rush. Only extreme care on the part of every man doing repairs can prevent accident. Observance of the following suggestions will be an aid to this end.

Never start a repair job on a power machine without making *sure* that the power cannot be accidentally turned on. If possible, padlock the operating valve or lever and keep the key in your pocket until the work is done.

Never enter a boiler without taking the precautions outlined above and making sure that some responsible person in the boiler room knows what you are doing. Never make even slight repairs to a boiler, steam line or other apparatus *while under pressure*. A serious explosion may result from neglect of this suggestion.

When hoisting material, securely bind it by means of safe hitches. Find out the safe load for the slings, ropes, chains or cables you are using. Never exceed this safe load. Do not pass under material suspended by a crane or hoist.

In working overhead, see that scaffolds are solidly and substantially built; that ladders are strong, and securely held in position. A sign "Workmen Overhead" should be put at every place above which men are working. Be careful that tools or material do not fall on men who may be below. When the job is finished see that nothing is left lying about which may fall or be jarred down and so cause injury.

Never enter chambers or compartments which may contain gas or fumes that are poisonous or inflammable without first airing them thoroughly and then testing to be sure it is safe to go into them.

Do not start up any machine without first turning it over by hand if this is at all possible. Improper connections, mislaid material or tools may be discovered in this way and an accident prevented.

Never handle electrical apparatus, wires or switches unless you have been ordered to do so by your foreman. The line may contain dangerous current or a connection may be made which will injure either yourself or another workman.

Upon finishing any repair job replace safeguards; leave the working conditions in as near the original condition as possible, remove all tools and loose material and actually finish the job instead of only half doing it.

Many fatal accidents were caused last year by repairmen using careless methods—insecure scaffolds, improper slings for hoisting materials, defective ropes, falling objects, unprotected holes and defective ladders.

Use care and good judgment in all your work.

BOILER EXPLOSION CAUSED BY NEGLECTED SAFETY VALVE

One man was killed and two others were seriously injured and property worth thousands of dollars was destroyed when a boiler exploded in a power house of a Pennsylvania industrial plant. A neglected safety valve, that had become corroded, and lack of attention by the fireman, after fire was started under the boiler, caused this destruction. After the explosion, an inspection of the boiler failed to show any defects in material or workmanship, the metal apparently being in excellent condition. Neglect alone caused this destruction of life and property.

Fortunately the explosion occurred at 6:45 o'clock in the morning or fifteen minutes before the regular employes reported for work. The man killed and those injured were one hundred feet from the power plant and on their way to work when the force of the explosion struck them. The boiler that let go was the fire tube type and was one of a battery of five. A fireman, whose duty it was to report early to get the boiler into action, had started the fire and left the boiler house with all drafts on the fire. He returned later and observing the needle of the steam gauge indicating the highest pressure possible, he immediately ran from the boiler house and escaped injury.

It will never be actually known what pressure was on the boiler when it exploded but it is estimated that the pressure must have been at least between 500 and 600 pounds to the square inch.

The safety valve of the boiler was found in the woods about one thousand feet away. It was so badly corroded that even then it could not be operated. Had this safety valve received frequent inspections this accident would not have occurred. The day before the accident, the boiler had been cleaned to remove scale and this probably caused the early development of the high steam pressure.

The photographs show the boiler house as it appeared a few days previous to the disaster and immediately after the explosion. The deadly effect of an accident of this kind can be seen by comparing the two pictures. They should be an object lesson for every person operating a steam generating plant. The explosion ripped the boiler from front to rear, the shell being deformed from a cylindrical shape to a flat sheet.

Accidents of this nature unfortunately are too frequent and this explosion very forcibly illustrates the need of constant care that all appliances, necessary for the safe operation of a boiler, should be in such condition that they will always perform their duty.

PREVENTABLE ACCIDENTS

Investigations of accidents reported to the Department during the past few months have revealed the fact that the greater portion of these accidents could have been prevented. Disobedience of orders, willful neglect, carelessness and bad practices are factors in a large majority of cases and inasmuch as untold suffering and a great economic loss is occasioned by these factors, it might be worth while to cite a few accidents which have occurred in order to show to what extent, care and thoughtfulness are needed to reduce this awful toll which is being exacted from the industrial population of Pennsylvania. The following are a few typical cases in which the above-mentioned factors caused the accidents and represent classes of accidents which could easily be prevented if every person concerned would be careful:

Disobedience of Orders

At one of the quarries of the State an employe, in direct disregard of orders, rode on a truck loaded with stone. This truck is allowed to run down an incline by gravity and instead of walking behind, as

he had been told to do, the employe climbed on the truck and in jumping off got under the truck. His left ankle was broken and in addition he was badly bruised, so that he was compelled to remain away from work for many weeks and to lose a considerable sum in wages, besides enduring a great amount of suffering.

Improper Installation of Dangerous Apparatus

Two fatal accidents recently occurred where men came into contact with improperly placed and uninsulated heavy voltage electric lines. In one case an electric wire was carelessly placed in a passageway and an employe, after his day's work was done, started homeward. In the dark he walked against the exposed wire and received a fatal shock.

In another case, an employe was employed as a fireman of a steam drill and in carrying coal from a coal pile walked directly into a live wire and received a shock that killed him instantly. In this latter case, this employe had strict instructions to go a certain way, using a certain passageway but instead disregarded the orders and went another way. While this employe was killed by using a passageway which was forbidden, yet such dangerous things as live wires should not be placed in a position where any person could come in contact with them.

Taking a Chance

An employe of a certain plant had occasion to examine a motor. Instead of making the examination from the outside of the guard rail, which in this case was possible, he evidently climbed or stepped over the guard and was caught by the driving belt. He was immediately whirled to his death. Had it been absolutely necessary for this man to go inside of the guard rail, his first act should have been to stop the motor, thereby removing all possibility of an accident. The chance taker eventually gets caught in the long run.

"He Knew How to Do It"

An employe had been working at a "pickling" vat for over four years. This vat was used for "pickling" plates, the process being carried on in the following manner: Before the plate is put in the pickler, it is placed on edge in a cradle or rack. In this cradle or rack are set small iron rods about one-half inch in diameter, in order to keep the plates apart so that the pickle solution will have free action on the plates. The cradle or rack is then set in the vat. These vats extend about two feet above the floor level. This man had been repeatedly instructed to push on the cradle and not

to pull on it. He disobeyed the order and took hold of one of these iron rods, placed his foot against a pile of plates so he could get a greater leverage and pulled on it. The rod broke off and he fell into the vat with fatal result. Strict obedience to instructions is one of the prime requisites of a workman's duty.

Improper Use of Elevator

An employe in a warehouse was ordered to get some material from the third floor. It was necessary for him to use an elevator. Lifting up the safety gate, he started the elevator and when it reached the floor on which he was standing, without stopping it, he attempted to jump off while the elevator was in motion. His foot slipped and his body was caught between the safety gate and floor of the elevator. This caused his body to fall to the basement with the result of a fractured skull and instant death. No person should attempt to step on or off a moving elevator. Repeatedly accidents with serious and fatal results have occurred in this manner.

Neglected Wounds

The following accidents demonstrate the necessity of the prompt reporting of all injuries, regardless of how trivial, for attention and treatment. Serious cases of blood poisoning often occur from neglect, and not only result in the loss of dollars and cents but also cause great suffering, with perhaps the loss of a finger, hand, leg, or even life.

An employe in a steel mill while changing rolls, caught his finger on the sharp edge of a bolt and failed to have the same attended to. As a result the wound became infected necessitating the absence of the injured from his work for three weeks.

In an axle works a workman was assembling differential cases and while doing so, received a scratch on the first finger of his right hand. He did not report this injury but remained away from work the next day. He did not apply to the company hospital for treatment but saw one of the city physicians. Blood poisoning set in and an operation was performed five days after the injury was received. This man will be away from his work for at least three weeks, all due to carelessness in not reporting for treatment as soon as the accident occurred.

Horse Play

A workman in a knife manufacturing plant threw a six inch pipe nipple at a fellow workman, striking him on the hand and breaking the index finger on his right hand. As a result the injured man will

be absent from his work for at least two or three weeks. All fooling and horseplay should be prohibited and rigid rules should be adopted for the elimination of it.

SAFEGUARDING STRUCTURAL STEEL WORKERS IN OFFICE BUILDING ERECTION

E. A. GIBBS

MANAGER OF ERECTION, McCLINTIC-MARSHALL COMPANY, PITTSBURGH.

During the past few years, there have been a number of changes made in the practices of carrying on the erection of office buildings which have, undoubtedly, increased the safety of this class of work and greatly reduced the number of injuries in connection therewith.

One of the most important changes in the erection of office buildings is the substitution of steel derricks for wooden derricks, and also at an earlier date, the substitution of steel cable for manila rope. The condition of wooden derricks is more difficult to ascertain from inspection, and after they have been in use for some time they are liable to give way under loads far below their rated capacity. I recall a case where a derrick boom broke while lowering another derrick from the top of the building to the street. Fortunately, there were no serious injuries, but it seemed a miracle that a number of men were not killed, as a scaffold on which a large number of men were working was very nearly carried away by the falling load. The McClintic-Marshall Company discarded wooden derricks on all important work, years ago, and now uses nothing but steel derricks for light loads of 2 or 3 tons.

Another change in office building erection is that of using cable slings instead of chains. The difficulty in the use of chains arises from the fact that they are all made of wrought iron and become crystallized in the course of time, and even with frequent annealings they are liable to break under loads considerably under their rated capacity. Moreover, it is difficult to place a chain around a heavy member in a manner to avoid severe bending strains which are far more serious than the ordinary tension which comes on a chain lifting a load.

The use of cable slings for this class of work is becoming quite general. These slings are made very strong and any excessive wear or breaking of the individual strands is perfectly apparent, so that there

is no need of using the slings after they have become unsafe. Moreover, the slings are very much lighter than chains and a greater factor of safety can be used without heavy and clumsy equipment to handle it.

It is customary at the present time to lay plank flooring on the floor on which the work is being done. If the columns are made in two story lengths, this means that there is flooring over every other floor as soon as the derrick is raised to a higher level. This makes it far more unlikely for a man to be injured by falling from one floor to another and is a protection to the riveters working underneath from any objects falling from above.

More attention is being paid to the bracing of office buildings and to the loading of any one floor during erection. A number of accidents have happened in former years on account of overloading a floor by piling upon it steel or other construction material.

These are the more important changes in connection with office building erection practices. Of course, in every part of the work, greater precautions are being taken every day, and as is true of all other forms of construction work, the accidents are less in proportion to the volume of work done than in past years.

MOTION PICTURES TEACH SAFETY

Harrisburg manufacturers cooperated with the Department of Labor and Industry, in displaying thousands of feet of motion picture films to show vividly how accidents that occur in industrial establishments and result in injuries to employes may be avoided.

A series of "Safety First" motion picture entertainments were held in the auditorium of the Technical High School, Harrisburg during the first week in March.

Plans for the motion picture exhibit, showing actual scenes in the workshops were instituted by the Department of Labor and Industry following the tremendous increase in the number of accident reports received at the Bureau of Statistics and Information since the Workmen's Compensation Act became effective. Reports indicated that a thousand workers are injured a day in Pennsylvania. At that rate there will be more than 300,000 men and women injured in the industries of this State before the end of 1916.

Some of the films exhibited had been shown at the Panama-Pacific Exposition in San Francisco and others had attracted nation-wide interest. The subject matter of each film held the attention of the

spectators and created a popular appeal for safety. Realistic fire scenes, burning factories and dangerous rescues were included in the reels.

The Department of Labor and Industry furnished the motion picture machine, operator and several thousand feet of films for the accident prevention exhibit.

The Harrisburg industrial plants cooperating with the Labor Department in the "Safety First" motion picture entertainments distributed, free of charge, tickets of admission among their employes.

Among the industrial plants that assisted in the efforts to reduce accidents and provided entertainment and instruction for their employes were: Blough Manufacturing Company, Moorehead Knitting Company, Harrisburg Gas Company, United Cigar Company, Eureka Hand Laundry, Harrisburg Light, Heat and Power Company, Elliott-Fisher Company, City Star Laundry, Harrisburg Burial Case Company, Harrisburg Foundry and Machine Works, Hickok Manufacturing Company, Sanitary Family Washing Company, Morton Truck and Tractor Company, Harrisburg Telegraph, Star Independent, Patriot, Harrisburg Pipe and Pipe Bending Company, Brelsford Packing and Storage Company.

A MISDEMEANOR TO CARRY MATCHES INTO A POWDER MILL

Action has been taken by the Industrial Board of the Department of Labor and Industry in an effort to prevent explosions in powder mills in Pennsylvania. The Board has ruled that:

"No person in a powder mill shall carry or have upon his person matches, cigar lighters or contrivances or devices for lighting. Every mill shall be provided, at its entrance, with two (2) covered fireproof receptacles, one (1) for matches and the other for lighted cigars, cigarettes or pipe contents. Each of such receptacles shall be plainly labeled to show the purpose for which it is provided. No person shall enter such mill without first depositing in the receptacle provided any and all such matter. Notice to the effect that the carrying of matches is prohibited shall be conspicuously posted."

The law creating the Department of Labor and Industry provides that:

"Every person who violates any of the provisions of this act, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officer or agent of the Department of Labor and Industry in the performance of his duties in accordance with

the said rules and regulations, shall be deemed guilty of a misdemeanor; and shall upon conviction thereof, be punished by a fine of not more than one hundred dollars (\$100.00), or by imprisonment not exceeding one month, or both, at the discretion of the court."

The action of the Industrial Board, in adopting this rule, makes mandatory a regulation which heretofore has existed in all powder plants. Hereafter any employe of a powder plant violating a rule is not only subject to dismissal by an employer but is also liable to fine or imprisonment.

CONFERENCE ON INDUSTRIAL DISEASES

Physicians and surgeons from all sections in Pennsylvania, interested in industrial hygiene, occupational diseases and accident prevention in the industries, attended a conference on Industrial Hygiene, held at the State Capitol February 17, under the direction of the Division of Industrial Hygiene and Engineering of the Department of Labor and Industry.

It is planned to hold these conferences about every three months to promote cooperation between the Division of Industrial Hygiene and physicians retained by industrial plants for the prevention of occupational diseases.

Many large industrial plants were represented by physicians and surgeons retained in safety first work. The Workmen's Compensation Law as it affects physicians was explained at the conference and the procedure a physician should follow in reporting accident compensation cases to the Department of Labor and Industry was outlined in detail. Discussions occupied a large part of both morning and afternoon sessions.

The program of the conference was as follows:

Morning Session

Address of Welcome, Dr. John B. McAlister, President, State Medical Society of Pennsylvania.

Asphyxiation and Resuscitation, Dr. Elizabeth R. Bricker, Medical Inspector, Department of Labor and Industry.

Discussion,

Laws of Pennsylvania Relating to Industrial Hygiene, Dr. Francis D. Patterson, Chief, Division of Hygiene, Department of Labor and Industry.

Discussion,

Afternoon Session

Lead Poisoning, Dr. Francis D. Patterson.

Discussion,

The Workmen's Compensation Law as it Affects the Physician, Paul N. Furman, Chief, Bureau of Statistics and Information, Department of Labor and Industry.

Discussion,

It is the aim of the Department to make these conferences of value to every physician in Pennsylvania who is interested in industrial hygiene and occupational diseases. The physicians who were present at the conference come in contact with thousands of the workmen throughout the State and it is confidently expected that the succeeding meetings will be even more representative.

The following is a list of those physicians registered at the first conference:

List of Physicians Attending Conference

Name.	Firms Represented.
Dr. C. S. Apgar, ...	Armstrong Cork Company, Pittsburgh.
Dr. F. S. Arndt, ...	Pennsylvania Coal Co. and Temple Coal Company, Scranton.
Dr. Mitchell Bernstein, ..	Philadelphia.
Dr. T. J. Bowes, ...	Philadelphia Electric Co., Phila.
Dr. Stillwell C. Burns, ..	Baldwin Locomotive Works, Phila.
Dr. J. L. Christian, ...	Connell Anthracite Mining Co., Scranton.
Dr. George M. Coates, ..	Wetherill & Brother, Philadelphia.
Dr. E. W. Cross, ...	Ford Collieries Co., Curtisville.
Dr. G. M. Dickson, ...	Pittsburgh & Baltimore Coal Co., Pittsburgh.
Dr. G. E. Dietrich, ...	Worth Brothers Co., Coatesville.
Dr. J. K. Farrar, ...	Charles M. Dodson Co., Audenreid.
Dr. F. U. Ferguson, ...	Tunnel Coaling Company, Gallitzin.
Dr. J. Clinton Foltz, ...	American Pulley Company, The Rowland Spring Works and the Penna. Forge Co., Philadelphia.
Dr. H. T. Fogg, ...	National Biscuit Company, New York.
Dr. S. E. Hayes, ...	Shawmut Mining Co., St. Marys.
Dr. C. P. Henry, ...	The Carpenter Steel Company, Reading.
Dr. J. B. Hileman, ...	Pennsylvania Railroad Company, Phila.
Dr. H. T. Horn, ...	Atlas Cement Company, Coplay.
Dr. E. H. Ingram, ...	William Cramp & Sons Ship & Engine Building Co., Phila.

- Dr. D. H. Lake, ... Kingston Coal Co. and Stevenson Coal Co.,
Wilkes-Barre.
- Dr. Thomas W. Jackson, . H. K. Mulford Co., Philadelphia.
- Dr. H. E. Klase, ... Philadelphia & Reading R. R. Co., Phila.
- Dr. C. A. Lauffer, ... Westinghouse Electric & Mfg. Co., East
Pittsburgh.
- Dr. John B. Lowman, ... Cambria Steel Company, Johnstown.
- Dr. J. W. Luther, ... New Jersey Zinc Co., Palmerton.
- Dr. Alfred A. Marshall, . Powers-Weightman-Rosengarten Co., Phila. .
- Dr. C. H. Pike, ... Harrison Brothers & Company, Inc., Phila.
- Dr. E. N. Piper, ... National Lead & Oil Co., Pittsburgh.
- Dr. W. A. Prideaux, ... Commercial Coal Mining Co., Expedit.
- Dr. H. T. Prideaux, ... Pennsylvania Coal & Coke Co., Cresson
- Dr. George Robinson, ... Keasby & Mattison Co., Ambler.
- Dr. J. B. Rogers, ... Phila. & Reading Coal & Iron Co., Pottsville.
- Dr. R. W. Rubin, ... Westmoreland Coal Co., Philadelphia.
- Dr. L. A. Shoudy, ... Bethlehem Steel Company, South Bethle-
hem.
- Dr. William Scull, ... John T. Lewis & Bros. Co., Phila.
- Dr. L. H. Seaton, ... Consolidated Coke Co., Pittsburgh.
- Dr. Henry F. Smyth, ... University of Pennsylvania, Phila.
- Dr. D. E. Sloan, ... Pittsburgh Steel Products Co., Monessen.
- Dr. Evans, ... Oliver Iron & Steel Co., Pittsburgh.
- Dr. A. W. Urmson, ... Carnegie Steel Company, New Castle.
- Mr. A. P. Wetherill, ... Wetherill & Brother, Philadelphia.
- Dr. Randall Zimmerman, Westinghouse Air Brake Co., Wilmerding.
- Dr. J. L. Zimmerman, ... Hershey Chocolate Company, Hershey.

BUREAU OF INSPECTION

State-wide inspection of public school buildings, special inspection of factories, renewed efforts for accident prevention, specialization in inspection of steam boilers and elevators and a general campaign against contaminated mattresses have been special activities of the Bureau of Inspection during the last few months.

The regular corps of inspectors in all sections of the State report that the enactment of the compensation laws have aided them greatly

in obtaining safeguards for machinery in factories and in organizing committees in plants for the education of the workmen in accident prevention.

In the inspection of public school buildings, the inspectors are meeting with a wholesome spirit of cooperation which is resulting in the improvement of conditions in the buildings where children are compelled to spend five to six hours a day. The recommendations of inspectors for school buildings have been mainly that additional means of egress be provided, that housekeeping conditions be improved and that further precautions be established in connection with the heating plants to safeguard against fire.

Owners of factories and employers of industrial plants in general are exhibiting an increased desire to prevent accidents in their works.

The Bureau has lately assigned several men, as special inspectors to make a survey of foundries throughout the State, and this work has just been commenced. Every foundry in Pennsylvania must install toilets and wash rooms according to law.

Accident prevention being the principal purpose of the Bureau, arrangements are now being made to detail a "flying squadron" selected from the inspection force to follow up serious and fatal accidents reported to the Department, investigating causes and working out means for the prevention of similar accidents in the future. These inspectors will be specially instructed along the lines of organization and education to be applied in Pennsylvania's industrial establishments to avert accidents that cannot be prevented by the mere installation of mechanical safeguards.

Divisions of Boiler and Elevator Inspection have been established in the Bureau of Inspection. Each of these divisions is in charge of a specialist located in the Harrisburg office who will supervise the work in these branches of the Bureau's work.

In the Division of Buildings a considerable number of plans have been received and checked as will be seen from the list following this article. It will be observed that the majority of these plans cover the erection of fire escapes. This is the direct result of a campaign that has been conducted for the betterment of exit facilities in all types of buildings, and gives a fairly accurate estimate of the work being handled by this Division. This list does not include the alteration jobs that are constantly coming up, principally in theatres and motion picture houses.

The Division of Instructions and Compliances continues to bear a heavy burden urging prompt compliance with instructions issued by the inspectors in their inspection tours. The Bureau calls the attention of employers to the importance of meeting the provisions of such instructions and seeing that the regular form of compliance

notice is mailed to the inspector promptly. Failure to do this not only results in voluminous correspondence, but also renders the delinquent liable to prosecution. Every employer should make every effort to assist the Department and the Bureau of Inspection to handle this work promptly and efficiently, and not make it necessary to destroy the cordial relations that should exist between the Department and the employers of labor throughout the Commonwealth.

Mattress Inspection, another feature of the several special inspections that the Bureau is now making, is being handled through the Division of Hygiene.

PLANS APPROVED WEEK ENDING FEB. 5, 1916

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Wilkes-Barre, ...	Apartments, ...	Owen McGlynn, ...	Isidore Gross.
Etna, ...	School, ...	Geo. O. Rogers, ...	
Selinsgrove, ...	School, ...	Geo. W. Anne & Son, ...	Chas. Lutz & J. L. Packer.
Selinsgrove, ...	Apartments, ...	Geo. W. Anne & Son, ...	Susquehanna Univ.
Selinsgrove, ...	Dormitories, ...	Geo. W. Anne & Son, ...	
Nazareth, ...	Men's Home, etc., ..	Geo. W. Anne & Son, ...	Christ Home for Boys and Girls.
Warminster, ...	Home, ...	Geo. W. Anne & Son, ...	Robert Swain.
Sharon, ...	Hotel, ...	Ellwood City Iron & Wire Works.	
Carnegie, ...	Wm. D. Hill Bldg., ..	Taylor & Dean, ...	
Zelienople, ...	School, ...	Ellwood City Iron & Wire Works.	
W. Brownsville, ...	School, ...	Taylor & Dean, ...	
Oakdale, ...	Boys' Home, ...	Taylor & Dean, ...	American Meter Co.
Erie, ...	Metric Metal Wks., ..	Taylor & Dean, ...	
Carnegie, ...	Geo. Picard Bldg., ..	Taylor & Dean, ...	Mary F. Woods.
Swissvale, ...	Apartments, ...	Taylor & Dean, ...	David F. Lane.
Wilkinsburg, ...	Apartments, ...	Taylor & Dean, ...	Alle. R. E. & Imp. Co.
Wilkinsburg, ...	Apartments, ...	Taylor & Dean, ...	Robinson & James.
Wilkinsburg, ...	Factory, ...	Taylor & Dean, ...	W. E. Carnahan.
Carnegie, ...	Apartments, ...	Taylor & Dean, ...	W. J. Burgan.
Carnegie, ...	Apartments, ...	Taylor & Dean, ...	Gilbert Martin.
Renovo, ...	Apartments, ...	National Fdy. & Mch. Co.,	A. P. Pfoutz.
Jersey Shore, ...	Theatre, ...	National Fdy. & Mch. Co.,	
Selinsgrove, ...	Factory, ...	Geo. W. Anne & Son, ...	Selinsgrove Shoe Factory.
Easton, ...	Apartments, ...	C. D. Trumhaur, ...	Louis Sulkin.
Lehighton, ...	Hotel, ...	F. N. Peter & Bro., ...	

FACTORIES.

S. Bethlehem, ...	Machine Shop, ...	Westinghouse. Church, Kerr Co.	Beth. Fdy. & Mch. Co.
Pittsburgh, ...	Wash Room, ...		Union Steel Casting Co.

THEATRES.

New Salem, ...	M. P. T., ...		Chas. Brien.
Olyphant, ...	M. P. T., ...	Louis Reisman, ...	Louis Cohen.
St. Michael, ...	Theatre, ...		Wm. Hall.
Bentleyville, ...	M. P. T., ...	W. H. Hendershot, ...	L. Fero.
Scottdale, ...	Arcade Treatre, ...	B. F. Zearley, ...	Arcade Theatre Co.

LODGING HOUSES.

Harrisburg, ...	Sylvan Hgts. Home, ..	Paul Monaghan, ...	
Lancaster, ...	J. F. Nissley Bldg., ..	H. M. Bartholomew, ...	

HALLS.

Allentown, ...	Y. M. C. A., ...	Louis E. Jallade, ...	
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Summary

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Halls, ...	1
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Division of Boiler Inspection

The Department of Labor and Industry in the need of more accurate and thorough standards for the construction and maintenance of boilers throughout the State, has adopted the boiler code approved and recommended by the American Society of Mechanical Engineers. This code as adopted, applies to all stationary boilers exclusive of those in the cities of the first and second class and such third class cities as have adopted their own boiler regulations.

A Division of Boiler Inspection has been created in the Bureau of Inspection to supervise the administering of this code.

The law requires that every steam boiler shall be inspected at least once each year by either the casualty company which insures the boiler or by an inspector approved by the Department of Labor and Industry, and that a copy of the report of such inspection be kept on file at the office of the company owning the boiler, while a second copy of the report must be sent to the Department of Labor and Industry. The Division of Boiler Inspection reviews these reports and ascertains if the repairs necessary to put the boiler in a safe condition are carried out.

The importance and absolute necessity for this work can be seen from the fact that during the month of January alone, thirteen hundred and sixty-five inspections were made of boilers under the jurisdiction of this Department. These inspections resulted in the correction of more than one hundred conditions which made some of these boilers dangerous to the lives of persons in the immediate neighborhood. One of these boilers was in such a serious condition that it was necessary for it to be condemned.

The boiler inspectors, who are approved by this Department, are located throughout the State and in every case an uninsured boiler must be inspected by one of these men each year. The following is a list of these approved inspectors:

Arrington, James, ...	West Grove, ...	Chester County.
Aurand, S. F., ...	Beaver Springs, ..	Snyder County.
Avory, F. P., ...	Tunkhannock, ..	Wyoming County.
Bergner, W. S., ...	Harrisburg, ...	Dauphin County.
Bufflap, W. E., ...	York, ...	York County.
Charlesworth, E. F., ...	Honesdale, ...	Wayne County.
Clinch, A. F., ...	York, ...	York County.
Comer, W. C., ...	Barto, ...	Berks County.
Double, Geo. M., ...	Bradford, ...	McKean County.
Dowdell, Howard, ...	Meadville, ...	Crawford County.
Dunmyer, S. S., ...	Johnstown, ...	Cambria County.
Farley, Peter V., ...	Bloomsburg, ...	Columbia County.
Flickinger, C. E., ...	Hanover, ...	York County.
Geyer, A. C., ...	St. Marys, ...	Elk County.
Geese, J., ...	Bloomsburg, ...	Columbia County.
Griggs, D. (118 Mulberry St.), ...	Harrisburg, ...	Dauphin County.
Gordnier, F. E., ...	Coudersport, ...	Potter County.
Hart, John T., ...	West Pittston, ..	Luzerne County.
Hart, J. B., ...	Ashley, ...	Luzerne County.
Hawlecker, J. M. (136 4th St.), ...	Chambersburg, ..	Franklin County.
Konalczk, Frank, ...	Houtzdale, ...	Clearfield County.
Kunkle, J. L., ...	McCoysville, ...	Juniata County.
Krecht, M. O., ...	West Salisbury, ..	Somerset County.
Lester, C. E., ...	Meadville, ...	Crawford County.
Leonard, L. R., ...	Uniontown, ...	Fayette County.
Motter, Geo. F. & Sons, ...	York, ...	York County.
Martin, H. H., ...	New Bloomfield, ..	Perry County.
MacCallum, J. (60 Wood St.), ...	Wilkes-Barre, ..	Luzerne County.
Oberholtzer, John R., ...	Harrisburg, ...	Dauphin County.
Possinger, A. F., ...	West Auburn, ..	Susquehanna County.
Reynolds, George S. (People's Bank Bldg.), ...	Lincoln Place, ..	Allegheny County.
Ravey, Joseph H., ...	Oil City, ...	Venango County.
Schroeder, Samuel, ...	Bellwood, ...	Blair County.
Shyrock, John E. (R. D. No. 1), ...	Mt. Union, ...	Huntingdon County.
Sipe, Wm. H., ...	York, ...	York County.
Schott, Rueben, J., ...	Lebanon, ...	Lebanon County.
Stevenson, S. M., ...	Grove City, ...	Mercer County.
Schroak, Philip, ...	Lock Haven, ...	Clinton County.
Sterner, Edward V., ...	York, ...	York County.
Seybert, Grant (102 East St.), ...	Butler, ...	Butler County.
Speed, James E (127 Sass St.), ...	Erie, ...	Erie County.
Thery, Joseph, ...	Ford City, ...	Armstrong County.
Tomlinson, D. C., ...	Mansfield, ...	Tioga County.
Trimble Philip (Colonial Hotel), ...	South Bethlehem, ..	Northampton County.
Vandergrift, C. T., ...	Columbia, ...	Lancaster County.
Washburner, T. M., ...	Lake Cary, ...	Wyoming County.
Westcott, W. W., ...	Oxford, ...	Chester County.
Young, D. A. (630 Lime St.), ...	Lancaster, ...	Lancaster County.
Zehrunig, W. S., ...	Meadville, ...	Crawford County.

Division of Elevator Inspection

In an effort to reduce the number of elevator accidents in Pennsylvania a Division of Elevator Inspection has been established in the Bureau of Inspection.

It is the aim of the Department to maintain all elevators in the State in a safe condition. In order to do this uniformly, an elevator code will soon be adopted by the Industrial Board of this Department. Pending the adoption of this code the Division of Elevator Inspection desires that duplicate plans for all new elevator work be submitted for approval before construction begins. These plans should show accurately and clearly the location of the elevator and give the size of material and all other information necessary to fully acquaint the Department with the proposed work. Such plans need not be submitted to this Department for elevators in cities of the first and second classes, as elevator construction in these cities is under the jurisdiction of the local authorities.

The cooperation of all architects, elevator manufacturers and repair companies has been solicited in this important work and it is confidently expected that within the near future the construction and maintenance of elevators throughout the State will be much more nearly uniform and the number of elevator accidents materially reduced.

Eighty elevators were inspected by the Division of Elevator Inspection during the month of January. Out of this number, four hand power elevators with rope grip attachment were condemned owing to these machines not having automatic stops and being considered unsafe for further service. Two, chain belt driven, automobile lifts were also condemned as not considered safe.

In January an elevator inspector of the Department of Labor and Industry made an investigation of an accident to a chain-driven automobile elevator, and found that the platform had dropped a distance of 16 feet with a load of 6,500 pounds including two passengers, although these men were badly shaken up, fortunately they were not seriously hurt. The dropping of the platform was caused by the driving shaft twisting off. The tenants of this large garage declared that they had never been informed as to the capacity of the elevator. One of the tenants advised the inspector that he had been placing loads of 8,500 pounds on the elevator.

No overhead grating had been provided and in order to oil the overhead sheaves it was necessary for a man to walk out over an open hatchway on a four inch beam at a height of fifty feet. The bearing boxes used for the overhead hoisting sheaves for this 6,500 pound

elevator were exactly the same size bearing boxes that are being used on some elevators of the 2,000 pound type. Hatchway gates had not been installed although one hundred men were employed in the garage.

In a large manufacturing plant, fourteen elevators had been in operation only about four months. In testing out the car safeties on seven of these elevators, it was found that when the safety dog gripped the steel rail, the grip rods on the side of car, which apply the safety dog, buckled, owing to the rods being too long. In order to make the operation of these safety devices positive it was necessary to cut off each rod two inches. The slack cable devices were also found to be not working properly, due to rust caused by lack of oil. Electric brakes had not been properly adjusted and the shoes were dragging on the wheel. At least ten cotter pins were found missing from bolts on nearly every machine, and others in place had not been opened. Overhead platforms had not even been cleaned and crow bars, tools, boxes and burlap were left lying on the different platforms by the elevator erector.

As all of these machines were installed in steel towers it would have been possible for this material to have worked its way off these platforms by the vibrations and, falling, would probably have caused a fatal accident to some one of the hundred workmen employed on every side of the elevator towers. No final inspection had been made on any of these elevators. The erecting foreman had simply considered the work safe and complete and on the strength of his statement, the firm for whom the elevators were installed, made final payment for the entire installation.

The inspector of this Bureau when submitting his report to the manager of this concern, was advised that no final inspection had been made owing to the plant being very busy and that they had trusted to the elevator contractor. All elevator construction companies should execute the utmost care in making a final inspection of their work. This inspection should be made by a competent elevator mechanic. The electric motor should be carefully inspected. A volt and ampere reading should be made of the car running with and without load. By test, one can determine just what current is being received and the amount of amperes the motor is taking.

HIGH RECORD OF 1916 ACCIDENTS REPORTED TO THE BUREAU OF STATISTICS AND INFORMATION.

Injuries were sustained by 13,027 workers in Pennsylvania industrial plants during the first sixteen days of February, an average

of almost 1,000 on every working day. Several times during the period more than 1,000 men were injured on a single day. The highest daily record of injured workmen was 1,190. During the first sixteen days of February, 92 were killed. This number does not include 27 fatalities in one mine catastrophe in western Pennsylvania and several other fatalities.

That record is based on reports submitted to the Bureau of Statistics and Information of the Department of Labor and Industry.

Accident reports, received at the Bureau of Statistics, during February, show a marked increase over January. During the month of January 13,465 workers were injured, including 129 killed.

During the first 47 days of this year, not excluding Sundays or holidays, reports received indicate that 221 workers were fatally injured.

During the entire year of 1915 reports of only 61,540 injured workers including 1,205 fatalities were received at the Department of Labor and Industry. The accident reports have been increasing steadily in number since the Workmen's Compensation Act became effective.

THE DIVISION OF MUNICIPAL STATISTICS OF THE BUREAU OF STATISTICS AND INFORMATION

At the last session of the General Assembly an act creating a Division of Municipal Statistics and Information in the Bureau of Statistics and Information of the Department of Labor and Industry was passed by the Legislature and approved by the Governor. The act provides that the Division shall gather, classify and index, and make available statistical and other information, from any and every source, that may be helpful in improving the methods of administration of the several municipalities of the Commonwealth and making it the duty of every city or borough official to furnish such information as may be requested.

The purpose of the Division is to act primarily as a clearing house of municipal endeavor. It will eventually be in position to furnish statistics and information of what all the municipalities are doing in the older activities and experiments in new activities. What municipalities seem to need most is official guidance for standardization in the activities in which they are already engaged rather

than the outline of additional ones. The chief information to be gathered should relate to administration. There are many sources of information as to new activities, but information as to administration is very meagre. The endeavor of the Division is to standardize municipal administration rather than municipal activities, because administration should be uniform; whereas, the activities themselves must frequently vary to meet local conditions. The Division will be an instrument to serve the municipal government rather than the people, because the people usually know the activities in which they want their governments to engage, but the governments do not always know how to engage in such activities.

On July 15, 1915, a Municipal Statistician was appointed and along the lines mentioned the work of the Division has been begun. The first work was the securing of the names of the officials of thirty-three cities of the Commonwealth, nine hundred and twenty-seven boroughs and forty-six first class townships. Of the cities, the names of all city councilmen, of department heads and other officials, together with their salaries, were obtained. These have been compiled and revised as of January 1, 1916. The names of the burgesses, borough clerks, borough solicitors, and in many instances the names of the councilmen and various other borough officials, have been obtained from the nine hundred and twenty-seven boroughs. The names of the township commissioners, the secretary of the commission, the township solicitor, and in many other instances the health and other officers, have been compiled from the forty-six townships.

After this information had been gathered a "questionnaire" was sent to every borough, requesting information as to date of incorporation, the assessed valuation, the amount of borough tax, the amount of revenue from all sources, the amount of bonded or other indebtedness, the amount in dollars of last annual payment to the sinking fund for redemption of bonds or other indebtedness. In this way it is possible to give a history or statement of the financial condition of each borough. Other information obtained was whether the various boroughs had a source of water supply, also whether it was owned by the municipality; if not, the name and address of the company owning it. The same action was taken with respect to electric lighting and an investigation as to the manner of drainage and statement of number of fire companies and the number and kind of apparatus, whether or not these boroughs have parks or playgrounds and, if so, the number and area in acres, also the number and length of paved streets. The method of laying the paving and whether or not the boroughs have any state aid roads. Where trolley cars enter boroughs the name of the company operating the

system has been obtained. The investigations as to the manner and methods of borrowing the money showed boroughs in many instances to be very lax.

At the last session of the Legislature there was passed, and approved by the Governor an Act providing a system of Government for boroughs. This is a codification of the general laws of Pennsylvania relating to boroughs and is known as the General Borough Code. In order that the borough officials and members of the borough council should be made familiar with this act and understand the law governing a borough, the Division sent to the burgess of each borough sufficient copies for distribution to the members of the borough council. The Legislature also passed an Act to provide for the health, safety and welfare of minors by regulating their employment or work in certain trades or occupations in the streets or public places of the city, and providing penalties for the violation thereof. Many requests have been received by the Department as well as by the Attorney General, which have been referred to this Division, asking for a form of ordinance to provide regulations for the proper enforcement of the Act. A tentative form of ordinance, which could be adjusted to meet conditions in the community, was sent to each borough and in many instances these ordinances were passed by the boroughs. The Division daily receives requests for information. This is gathered and given to the boroughs as quickly as possible.

The smaller number of third class cities will make it possible for the Division to make more thorough and exhaustive investigations than it has been able to do in the boroughs. A compilation in street paving has been made from statistics received from twenty-eight of the thirty-one third class cities. This tabulation shows the number of miles of paved streets in each city, the principal kind of paving in use, the average price, whether or not the entire cost of paving is assessed against the abutting property and, if not, the proportion paid by the city; the method of making reduction on corner or irregular shaped lots, as required by the Clark Act; the kind of curbing in use, the price of it and the manner of payment. This information was sent the various officials in all of the third class cities and can be obtained by any of the municipalities upon request. The Division will make similar compilations of the gas, electric and water rates, both for municipal uses and the cost to individual consumers.

The boroughs of Coatesville, DuBois and Uniontown became cities of the third class on January 3, 1916. The Division has taken up with these cities the standardizing of their accounting and book-keeping and the establishment of a modern method of assessment

of real estate for city purposes. In Coatesville the council obtained an expert accountant to install a system suitable for third class cities. Steps were taken to make proper maps as the basis of real estate assessment and for the registry of real estate, as required by the Clark Act. In DuBois similar action was taken.

The Division will be glad to take up with any of the municipalities of the Commonwealth, or their officers, any subject of administration and will furnish the information just as soon as it can be gathered and properly tabulated.

PRODUCTION REPORTS

The Division of Production Reports, in the Bureau of Statistics and Information, is receiving large numbers of reports daily which evidences hearty cooperation on the part of all industrial concerns in the matter of furnishing statistics with regard to the various products of the State, the number of persons employed, their nationality, sex, weekly wages rates, number employed in each of the several months of the year, etc.

Prior to the year 1916, all public service companies were exempt from reports of this nature, but it has been deemed advisable by the Department to collect statistics, more particularly covering the subjects mentioned, from public service companies, including railroads, street railways, light, heat and power companies, water companies, telephone and telegraph companies, ferry companies, bridge companies, and in fact, all companies. This will enable the Department to give to the public more complete data, covering the subject of wages, and wage earners, than at any time heretofore.

These statistics will cover all employes, including those along the rights of way, such as trackmen, linemen, station agents, operators, etc., enabling the Department to compile statistics on every phase of industrial activity, and covering all wage earners of every class.

OCCUPATIONS OF WOMEN IN PENNSYLVANIA

Women are employed in almost every class of industry in Pennsylvania. The Bureau of Statistics and Information of the Department of Labor and Industry has received reports from 20,571 industrial establishments in Pennsylvania indicating 216,299 females

were employed during 1914. These statistics will be published in detail in the annual Production Report of the Department of Labor and Industry which will be issued within the next few weeks.

The numbers of women over fourteen years of age employed in various lines of work in Pennsylvania are as follows:

AGRICULTURE, FORESTRY AND FISHERIES.

Farm and Garden Products, ...	142
Nursery Products,.....	62
Plants and Flowers, ...	167
Others of this class, ...	12

DOMESTIC, PERSONAL AND PROFESSIONAL SERVICE.

Engineering Service, ...	18
Laboratory, ...	4

General Industries.

BUILDING TRADES.

Brick, Cement and Stone Work, ...	16
Building Construction, ...	92
Electrical Construction, ...	76
Painting and Decoration, ...	35
Paving and Road Construction, ...	13
Plumbing and Heating, ...	217
Railway Construction, ...	4
Roofing and Sheet Metal Work, ...	51
Structural Iron Work, ...	6
Miscellaneous Contracting, ...	150

CHEMICAL AND ALLIED PRODUCTS.

Alcohol, Acetate of Lime, ...	11
Baking Powder and Yeast, ...	6
Blacking, Cleansing Preparations, etc., ...	134
Blueing, ...	11
Chemicals, ...	623
Dyestuffs and Extracts, ...	7
Explosives, ...	101
Fertilizers, ...	10
Fireworks, ...	20
Flavoring Extracts, ...	16
Graphite and Graphite Refining, ...	1
Grease and Tallow, ...	3
Ink Printing, ...	6
Ink Writing, ...	6
Matches, ...	70
Miners Squibs, ...	219
Oils, Crude and Refined, ...	51
Oils, not elsewhere specified, ...	47
Paints and Varnishes, ...	210
Patent Medicines, etc., ...	1,209

Petroleum Refined, ...	114
Soap, ...	228
Sulphuric, Nitric and Mixed Acids, ...	12
Wood Distilling, (not including turpentine and rosin), ...	1
Natural Gas, ...	15
Others of this class, ...	96

CLAY, GLASS AND STONE PRODUCTS.

Artificial Stone, ...	6
Brick and Tile, ...	145
Cement, ...	29
Crucibles, ...	1
Emery and other Abrasive Wheels, ...	13
Glass Bottles, ...	356
Cut, ...	299
Decorative, ...	446
Plate, ...	12
Table Ware, ...	633
Window, ...	20
Sand, ...	25
Lamps and Chimneys, ...	427
Lime, ...	5
Mantel, Tile and Brick, ...	38
Marble and Stone Work, ...	25
Mirrors, ...	75
Paving Materials, ...	2
Pottery, Terra Cotta and Fire Clay Products, ...	304
Wall Plaster, ...	6
Others of this class, ...	10

CLOTHING MANUFACTURE.

Clothing, Horse, ...	356
Men's, ...	3,567
Women's, ...	5,870
Corsets, ...	929
Furnishing Goods, Men's, ...	7,621
Hats and Caps, other than felt, straw and wool, ...	301
Hats, Fur—Felt, ...	1,802
Straw, ...	307
Hosiery and Knit Goods, ...	27,930
Ladies' Skirts, ...	462
Millinery and Lace Goods, ...	3,823
Neckwear, ...	628
Overalls, ...	723
Shirt Waists, ...	3,641
Suspenders, ...	337
Underwear, ...	7,090
Gloves, other than leather, ...	1,391
Others of this class, ...	388

FOOD AND KINDRED PRODUCTS.

Bread and other bakery products, ...	2,829
Butter, Cheese and Condensed Milk, ...	255
Canning and Preserving, ...	255

Chocolate and Cocoa Products, ...	887
Coffee and Spices, Roasting, etc., ...	211
Confectionery, ...	4,291
Cordials and Syrups, ...	2
Flour and Grist Mill Products, ...	95
Food Preparations, ...	498
Molasses, ...	58
Peanuts, Grading, Roasting, etc., ...	54
Pickles, Preserves and Canned Goods, ...	1,462
Slaughtering and Meat Packing, ...	189
Sugar Refining, ...	102
Vinegar and Cider, ...	9
Others of this class, ...	1

LEATHER AND RUBBER GOODS.

Belting and Hose, Leather, ...	11
Belting and Hose, Woven and Rubber, ...	57
Boots and Shoes, ...	4,530
Boots and Shoes, Rubber, ...	3
Fur Goods, ...	113
Gloves and Mittens, Leather, ...	47
Leather, Tanned, Curried and Finished, ...	515
Miscellaneous, ...	86
Leather Goods, ...	761
Rubber Goods, not elsewhere specified, ...	418
Trunks and Suit Cases, ...	70
Others of this class, ...	36

LIQUORS AND BEVERAGES.

Carbonated Waters, ...	43
Liquors Distilled, ...	191
Liquors, Malt, ...	43
Vinous, ...	18
Mineral and Soda Waters, ...	23
Table Waters, ...	8
Others of this class, ...	37

LUMBER AND ITS REMANUFACTURE.

Barrels and Kegs, Wooden, ...	6
Billiard Tables and Materials, ...	3
Bobbins and Spools, ...	13
Boxes, Cigar, ...	821
Packing, etc., ...	34
Carriages, Wagons and Materials, ...	37
Carriages and Sleds, Children's, ...	7
Caskets and Undertaker's Supplies, ...	270
Cooperage and Wooden Goods not elsewhere specified, ...	10
Furniture, ...	174
Lumber and Timber Products, ...	51
Models and Patterns, not paper, ...	2
Planing Mill Products, ...	273

Refrigerators and ice boxes, ...	12
Washing Machines and Wringers, ...	70
Wood, Turned and Carved, ...	109
Novelties, ...	47
Others of this class, ...	18

PAPER AND PAPER PRODUCTS.

Rags, Paper, ...	63
Boxes, Fancy and Paper, ...	3,684
Card cutting and Designing, ...	64
Labels and Tags, ...	139
Paper and Wood Pulp, ...	20
Paper Goods, not elsewhere specified, ...	996
Pulp goods, ...	112
Sand and Emery Paper and Cloth, ...	13
Stationery goods, not elsewhere specified, ...	961
Wall paper, ...	198
Others of this class, ...	59

PRINTING TRADE.

Electroplating, ...	8
Engraving and Diesinking, ...	398
Photoengraving, ...	37
Printing and Publishing, ...	7,040
Stereotyping and Electrotyping, ...	14
Others of this class, ...	9

TEXTILES.

Bags, other than paper, ...	127
Blankets, flannels, etc., ...	719
Braids, tapes, and bindings, ...	1,617
Carpets and rugs, other than rag, ...	3,977
Carpets, rag, ...	50
Cloth Sponging and Refinishing, ...	1
Cordage and Twine, jute and linen goods, ...	1,121
Cotton goods, including small wares, ...	2,706
Curtains, other than lace, ...	150
Dyeing and Finishing Textiles, ...	1,016
Embroideries and Handkerchiefs, ...	1,565
Haircloth, ...	130
Hammocks, ...	66
Hat and cap materials, ...	103
Lace goods, ...	2,139
Shoddy, ...	31
Silk and silk goods and throwsters, ...	26,276
Thread, ...	217
Towels, ...	638
Waste, ...	142
Wool Pulling, ...	17
Woolen, Worsted, and Felt Goods and Wool Hats, ...	4,436
Yarns, ...	8,864
Others of this class, ...	145

MISCELLANEOUS PRODUCTS.

Artificial flowers, feathers and plumes, ...	546
Awnings, Tents and sails, ...	75
Asbestos products, ...	191
Baskets, Rattan and willow ware, ...	40
Brooms, ...	24
Brushes, ...	64
Buttons, ...	589
Charcoal, ...	2
Coke, ...	60
Cork cutting, ...	695
Curled hair and glue, ...	65
Dairymen's, Poultrymen's and Apiarists' Supplies, ...	13
Dentists' Materials, ...	141
Fancy articles, not elsewhere specified, ...	182
Foundry Supplies, ...	5
Flags, banners, regalia, emblems, etc., ...	146
Fuel manufactured, ...	121
Gold and Silver leaf and foil, ...	168
Hair work, ...	121
Hand stamps, stencils and brands, ...	56
House furnishing goods, not elsewhere specified, ...	27
Ice, manufactured, ...	44
Mats and matting, ...	103
Mattresses and spring beds, ...	203
Mucilage and paste, ...	27
Musical Instruments, not specified, ...	1
pianos and organs, ...	33
Oil cloth and linoleum, ...	7
Oil well supplies, ...	13
Optical goods, ...	362
Pens, Fountain, Stylographic, etc., ...	38
Phonographs and Graphophones, ...	6
Pipes and tobacco, ...	6
Photographic apparatus and materials, ...	152
Roofing Materials, ...	20
Signs and advertising novelties, ...	132
Soda water apparatus, ...	9
Sporting and athletic goods, ...	689
Statuary and art goods, ...	2
Steam packing, ...	18
Surgical appliances and artificial limbs, ...	236
Teeth, ...	781
Toys and games, ...	274
Umbrellas and parasols, ...	1,050
Upholstering materials, ...	780
Whips, ...	16
Window shades and fixtures, ...	24
Others of this class, ...	181

LAUNDRIES.

Laundry work, ...	8,121
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METAL AND METAL PRODUCTS.

Agricultural Implements, ...	15
Aluminum and its products, ...	74
Automobiles and parts, ...	84
Axes and edged tools, ...	42
Axles, ...	7
Babbitt metal and solder, ...	6
Bars, muck iron, ...	2
rolled iron, ...	8
rolled steel, ...	5
Billets, blooms, and slab steel, ...	683
Bicycles, motorcycles, and parts, ...	3
Boilers, tanks and vats, ...	47
Bolts, nuts and rivets, ...	508
Brass and bronze products, ...	138
Cars, ...	50
Car wheels, ...	1
Castings, grey iron, ...	184
steel, ...	27
Chains, ...	6
Cornices, ceilings, etc., ...	10
Cutlery and surgical instruments, ...	43
Elevators, ...	14
Engines, gas and gasoline, ...	29
railroad, steam, ...	105
stationary, ...	18
Ferro alloys, ...	6
Files, ...	300
Fire escapes, ...	1
Fire arms and ammunition, ...	5
Fixtures, gas and electric, lamps and reflectors, ...	598
Forging, iron and steel, ...	49
Frogs and switches, ...	18
Hardware and specialties, ...	795
Hoops, bands and cotton ties, ...	8
Horse shoes, ...	1
Ingots, basic, open hearth, ...	4
crucible, ...	7
Iron, pig, basic, foundry and forge, ...	6
and steel work, ornamental, ...	26
Instruments, professional and scientific, ...	79
Machinery, ...	2,138
Machine tools, ...	43
Motor, gas, electric and water, ...	49
Motors, ...	54
Nails, spikes, cut and wrought, ...	27
wire, ...	51
Needles, pins, hooks and eyes, ...	399
Novelties, metal, ...	17
Pipes, cast iron, ...	10
and tubing, rolled, ...	197
Plates, sheared, ...	1
universal, ...	4
Plumbers' supplies, ...	197

Pulleys, hangers, bearings, ...	64
Pumps and valves, ...	16
Radiators, ...	18
Railroad supplies, ...	165
Rods, steel, in coils, ...	2
Safes, vaults and locks, ...	41
Saws, ...	91
Scales, ...	10
Scrap iron and steel, ...	106
Screws, Machine, ...	4
Wood, ...	26
Shafting, cold rolled, drawn and turned, ...	13
Shapes, other iron and steel, ...	5
structural, heavy, ...	46
structural, light, ...	22
Sheets, ...	29
Shovels, scoops and spades, ...	10
Signs, electric, ...	15
Silverware and plated ware, ...	11
Springs, ...	18
Steam fittings, ...	17
Stoves, heaters and ranges, ...	80
Supplies, electrical, ...	549
Tin plate, ...	290
Type founding, ...	25
Typewriters, ...	66
Ventilators, ...	3
Ware, tin and stamped, ...	556
enameled and galvanized, ...	126
Watches, clocks and jewelry, ...	453
Wheels, turbine, ...	9
Wire products, ...	268
Garages making repairs, ...	94
Repair shops, public service, ...	80
Others of this class, ...	78

MINES AND QUARRIES.

Clay, fire, ...	1
Slate roofing, ...	5
Slate, other than roofing, ...	25
Stone, cut, ...	1
crushed, ...	6
Stone, ...	13
Others of this class, ...	15

TOBACCO AND ITS PRODUCTS.

Cheroots and stogies, ...	1,090
Cigars, ...	22,883
Cigarettes, ...	37
Smoking tobacco, ...	80
Others of this class, ...	305

Total, ...	216,299
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SUPERVISION OF PRIVATE EMPLOYMENT AGENCIES BY THE BUREAU OF EMPLOYMENT OF THE DEPARTMENT OF LABOR AND INDUSTRY

Under the act creating the Bureau of Employment in the Department of Labor and Industry the duty of supervising private employment agencies, conducted for profit, was conferred on the State Bureau.

The law requires that all private employment agencies pay to the State an annual license fee of fifty dollars (\$50) and furnish a bond of one thousand dollars (\$1,000). In accordance with the duty of supervising the private agencies the Bureau of Employment of the Department of Labor and Industry has issued the following letter to every private employment agency within the State:

You will be governed by the following rules in the transaction of your business of Employment Agent for profit.

First—Your schedule of fees as submitted and approved by this Department cannot, and must not be changed unless with the approval of the Commissioner of the Department of Labor and Industry.

Second—No registration or other fee in lieu thereof shall be charged or received by the Employment Agent.

Third—No money or other valuable consideration shall be paid the agent until the applicant has been referred to a position.

Fourth—If any person fails, through no fault of his own, to obtain employment from the employer to whom he has been referred by any Employment Agent, or, after having been engaged by an employer, is not permitted by said employer to enter upon such employment, the whole amount paid by such person to the Employment Agent as a fee, or for transportation or other expenses, shall be refunded to him on demand.

Fifth—Every Employment Agent must give a receipt to each person from whom he has received any money or other valuable consideration whatsoever.

EXPLANATORY.

First—It will be a violation of the law for an agent to charge other than the schedule approved by this Department.

Second—No registration or any other sort of fee may be charged other than the regular schedule fee.

Third—No money or other valuable consideration shall be demanded or accepted by the agent until the applicant has been referred to a position. for which the agent holds a bonafide order from the employer.

Fourth—If an applicant has been sent to a position and fails to secure same, his fee, plus transportation or any other expense that he has been put to by the agent must be refunded to him on demand.

Fifth—Every agent must give a receipt to each person from whom he has received any money or other valuable consideration and said receipt must show the name of the position applicant was sent to, and also the name of the employer, and must not be changed after first being made out.

These rules must be complied with by agents doing business for profit in this State.

Work of the Employment Bureau During January

The Bureau of Employment of the Department of Labor and Industry found positions for 363 unemployed workers during January. At the Philadelphia offices 267 positions were filled by 238 men and 29 women. The Harrisburg office found work for 63 men and one woman. The Johnstown office placed 15 men and 17 women in employment. Within the next few weeks the Bureau will establish an additional branch office in Pittsburgh.

The Employment Bureau is rapidly extending its sphere of activity. With the assistance of State College the Bureau recently placed a dairy farm superintendent at Edmonton, Province of Alberta, Canada.

Requisitions for employes have been received from virtually all sections of Pennsylvania as well as from nearby sections of Ohio, New York, New Jersey and Delaware. During the last few weeks the Bureau has placed in employment, machinists, toolmakers, tool designers, lathe hands, pipe fitters, electricians, electrical instrument testers, chemists, printers, stenographers, bookkeepers, stock keepers, cooks, waiters, and head waiters.

SCHEDULE OF MERIT RATING AS APPLIED TO PENNSYLVANIA WORKMEN'S COMPENSATION INSURANCE

The schedule of merit rating which has been adopted for adjusting compensation insurance rates in Pennsylvania is materially different and much simpler than schedules used in other states. Charges are made for dangerous physical conditions under the control of the

employer and credit given for safety organization, first aid, and superior general factors. This schedule has been formulated and adopted by the Pennsylvania Compensation Rating and Inspection Bureau and approved by the State Insurance Department.

This Bureau is an association of all the casualty companies authorized to do business in Pennsylvania, and the State Fund; and is officially recognized by the State. All policies are reviewed by it to determine that the risk is written at the proper rate and, where schedule rating applies, every rating inspection is made by the Bureau. By this method an absolutely impartial rating is obtained, since the Bureau will determine the rate regardless of which company writes the business.

The rate which any manufacturing establishment must pay for Compensation Insurance is based upon two factors; a base rate and a modification of this base rate determined by inspection of the plant.

The base rates applicable to all risks in the State are determined by the experience of such risks throughout the country and are approved for each insurance carrier by the State Insurance Department.

Every manufacturing establishment whose estimated premium is \$20.00 or more, is subject to schedule rating for modification of its premium. The drafting of this system of schedule rating was placed, by the Bureau, in the hands of its inspection committee, which is composed of representatives from three stock companies, two mutual companies, the State Fund, and the State Insurance Department. This committee has held many meetings and has drafted a system of schedule rating which will govern the entire inspection work of the Bureau. In this system, charges are made for physical conditions, but only for physical conditions which are under the control of the employer.

The aim has been throughout, to promote accident prevention work and to give every encouragement to the prevention of accidents. A number of charges found in other systems have been eliminated either because they would not be affected by any reasonable compensation charge or because of inconsistencies which would develop by their use. For example, no building charges appear in this schedule. It is manifestly impossible to make a sufficiently heavy charge for non fireproof buildings or for the presence of employes above the fourth floor, so that building construction will be influenced thereby. The hazard in these cases is a catastrophe hazard caused by fire or panic. This catastrophe hazard is taken care of by a small addition to the base rate in each risk so that it is not necessary to consider it again in the schedule. No charge is made for the mere presence of

a machine or piece of apparatus, and no credit given for the absence of such equipment. For example, it is inconsistent to give a credit for a boiler located in a detached boiler house, since by so doing, the insured with such a boiler obtains a lower rate than his neighbor with the same risk, who has no boiler at all.

The credits under this system are for conditions which either tend to eliminate accidents or to reduce their severity. The largest credit is for a safety organization with inspection service and educational work; a credit of 12% of the base rate is given for this item. It is believed that such a credit is justified on account of the fact that an effective safety organization which is constantly on the alert to improve safety methods and instill into the workmen, the habit of thinking and working safely, will do more to eliminate accidents and reduce the cost of insurance than any other thing.

The second most important credit is for a fully equipped hospital with a doctor in attendance. A credit of 6% is given for such installation. When an accident has occurred, the amount of time lost, hence the amount of money payable by the insurance carrier, is tremendously reduced if proper medical attention can be given at once, and if all minor cuts or other injuries can be treated by an experienced man on the premises instead of being entirely neglected.

On account of the fact that it is impossible to forecast the effect of this schedule as applied throughout the State, it has been adopted tentatively for use in making a number of test inspections. When a sufficient number of test inspections have been made, the results will be compiled and if it is found that the schedule produces on the average, a rate materially at variance from the base rate, adjustments will be made. It is the intention that the application of this schedule shall not seriously alter the total premiums paid on Compensation Insurance in the State.

BULLETIN ISSUED BY THE WORKMEN'S COMPENSATION BOARD

A bulletin containing all the rules and regulations of the Workmen's Compensation Board, together with the list of forms required by the Board is appended in the following pages. This bulletin has been issued in pamphlet form and may be obtained upon application to the Bureau of Workmen's Compensation of the Department of Labor and Industry.

RULES AND RULINGS

OF THE

Pennsylvania Workmen's Compensation Board

ISSUED BY THE

Workmen's Compensation Bureau

OF THE

Department of Labor and Industry
Harrisburg, Pennsylvania

THE WORKMEN'S COMPENSATION BOARD

HARRY A. MACKEY, Chairman
JAMES W. LEECH
JOHN A. SCOTT
JOHN PRICE JACKSON, Ex-Officio

LEE SOLOMON, Secretary

FRANCIS SHUNK BROWN, Attorney General
Counsel Ex-Officio
FRANCIS H. BOHLEN, Counsel
H. C. HUBLER, Associate Counsel
SAMUEL I. SPYKER, Associate Counsel.

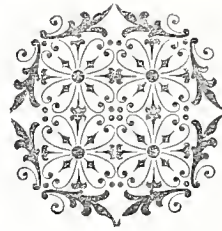


PREFACE.

This Bulletin contains the following matter:

Rules and Instructions.
Rules of Procedure.
Rulings of the Board.
List of Forms.

A further bulletin will be issued shortly containing reproduction of principal forms, rules for ascertaining weekly wages, and such further rulings which the Board may make, up to the date of publication. All persons having occasion to use any of the forms may obtain copies of the same by applying to the Workmen's Compensation Bureau, Department of Labor and Industry, Masonic Temple Building, Harrisburg.



RULES AND INSTRUCTIONS FOR THE EXECUTION OF COMPENSATION AGREEMENTS.

I. Agreements for Disability.

No agreement is necessary unless the disability resulting from the accident lasts more than fourteen days or the employer has failed to provide the surgical, medical, and hospital services required by Section 306(e) and has thus compelled the injured employe to obtain them at his own expense.

In computing the time when the disability becomes compensable, the day upon which the accident occurs is to be considered one of the fourteen days. Thus, if an accident occurs at any hour on Monday, January 3, 1916, the right to compensation begins on Monday, January 17, 1916.

Compensation Agreements, as provided in Section 411, must be executed (substantially as provided in Form W 14) whenever the disability continues for more than fourteen days. No receipt for compensation from an employe will be approved as a discharge of the liability created by Article III, unless such an agreement has been mailed or delivered to the Board and approved by it.

When after the first fourteen days of disability, there appears a reasonable prospect that the disability will terminate within a further period of fourteen days, no agreement need be executed until the disability has terminated or the further period of fourteen days has expired. An agreement showing that the disability has terminated together with the receipt (substantially as provided in Form W 51), showing that the agreed compensation has been paid, will close the case, subject however to its being re-opened by a new agreement or award, if at some later time an unexpected return of disability should result from the injury.

When the accident has caused the loss of a hand, foot, arm, leg or eye or the use thereof, an agreement should be made, immediately after the expiration of the first fourteen days, for the payment of compensation for the number of weeks appropriate to the particular dismemberment under Section 306(c).

When the disability is one of uncertain duration, an agreement should be made not more than four weeks after the disability begins. This agreement must fix the compensation to be paid for disability up to the date thereof. The future compensation may be provided for in one of three ways:

First: A new agreement may be made on each succeeding pay-day providing for the compensation then due.

- Second: The agreement may provide for the payment of compensation for a further definite period during which it is estimated that such disability is certain to continue.
- Third: It may provide that compensation shall be paid during the full 500 weeks, when the disability is total, or 300 weeks, when it is partial, "or so long as the disability continues unchanged."

While the first two methods may be used with advantage when there is a reasonable prospect of a speedy recovery of earning power, they are inappropriate if the disability appears likely to last any considerable time, since they would require the constant execution of supplemental agreements. In such case, the third method is strongly recommended. When an agreement has been executed or an award made providing for or ordering the payment of compensation "so long as the disability continues unchanged," a supplemental agreement (substantially as provided in Form W 14 a) should be executed, terminating or modifying the agreement or award, if the employee dies, returns to work or if his disability has terminated, diminished or increased in any other way.

If the employee or his dependents, in case of death, refuse to execute such an agreement when his disability has diminished or ceased or if the employer should refuse to do so when the employee's disability has increased, a petition can be presented to the Board under Section 426, (substantially as provided in Form W 35) praying it to order the agreement or award modified or terminated. And the filing of such a petition will suspend, until the petition be granted or refused, the payment of compensation to such an extent as the facts alleged therein would, if proved, require.

If any employee, entitled to compensation for disability under an agreement or award, dies as a result of his injury, an agreement (substantially as provided in Form W 15) should be immediately made with the dependent, dependents or personal representative of such employee. Such an agreement, stating as it must the date of the employee's death, will of its own force and without any further agreement, terminate the disability agreement as of the date of such death.

II. Agreements for Death Compensation.

When the accident causes death, without any intervening period during which disability compensation is payable to the employee killed, an agreement (substantially as provided in Form W 15) should be executed between the employer and the dependent, dependents or personal representative.

In many cases the amount of the death compensation will not vary during the period in which it is payable, unless one or more

of the dependents die or remarry. Thus if the deceased employe leaves only a widow or a widow and children, all under ten years of age, she will be entitled to the same percentage of her husband's wages from the beginning to the end of the three hundred weeks during which death compensation is payable, unless she remarry or she, or one or more of her children, die.

On the other hand, there will be many cases when the percentage of wages payable as death compensation is certain to diminish from time to time, as children the age of 16. Thus, if a widow be left with four children, aged respectively 11, 12½, 14 and 15½ years, she will be entitled to 60% of her deceased husband's wages for the first six months, to 55% for the next eighteen months, to 50% for the next eighteen months, to 45% for the next eighteen months and finally to only 40% for the last forty weeks of the full compensation period of three hundred weeks. The last paragraph of the Compensation Agreement for Death prepared by the Board (Form W 15) is designed for use in such a case. By using it, the varying compensation, payable under these changing conditions, can be agreed upon in one agreement so saving the annoyance and inconvenience of making a new agreement every time a child, brother or sister reaches the age of sixteen.

When, after an agreement has been executed or award made for death compensation, a widow remarries or a child, brother or sister dies, thus unexpectedly changing the amount of compensation of the person to whom it is to be paid, a supplemental agreement, (substantially as provided in Form W 15 a) should be executed.

If the widow upon remarriage, or the personal representative of a deceased person, who was the only dependent, or the remaining dependents, where there were several dependents, shall refuse to execute such a supplemental agreement as the facts require, a petition can be presented to the Board under Section 426 (substantially as provided in Form W 36) praying it to modify or terminate the Compensation Agreement or Award, and the filing of such a petition will, until the petition be granted or refused, suspend the payment of compensation to such an extent as the facts alleged therein would if proved, require.

RULES OF PROCEDURE.

1. All Agreements, Claim and other Petitions, and Answers must be substantially in accordance with the forms prepared by the Board. Copies of these forms may be obtained by application to the Workmen's Compensation Bureau, Harrisburg, Penna.

2. If the facts agreed upon in a Compensation Agreement differ materially from the facts stated in the Report of the Accident and

the reports supplemental thereto made to the Department of Labor and Industry, the Agreement will not be approved until the discrepancy is explained to the satisfaction of the Board.

3. Any Claim Petition, which does not contain the information required by Forms W 18 and W 19, will not be assigned to a Referee for hearing, but will be returned to the claimant with a request that he shall supply the information not given.

Petitions and Answers.

1. All Claim Petitions and other petitions, which allege facts as the ground for the relief prayed for by them, and all answers to petitions must be subscribed and sworn to or affirmed before a Compensation Referee, Notary Public, or other person authorized to administer oaths.

2. When a petition to the Board alleges facts as the ground for the relief prayed for therein, the adverse party must file an answer (substantially in accordance with Forms W 38, W 39, W 40) and any fact alleged in the petition, which is not denied by the answer, will be deemed to be admitted.

3. All Compensation Referees shall administer oaths free of charge and shall, when requested to do so, assist all parties in drawing claim petitions, answers and all other papers necessary for the administration of the Workmen's Compensation Act.

PROCEEDINGS BEFORE REFEREES.

Duties of a Referee Before a Hearing.

1. When a Claim Petition is referred to a Referee, he should endeavor to bring the parties to an understanding and to induce them to settle the claim, without further litigation, by an appropriate Compensation Agreement.

2. Whenever the facts stated in a Claim Petition differ materially from those stated in the Report of the Accident and the reports supplemental thereto made to the Department of Labor and Industry, the Referee shall make an investigation in person or by an Inspector of the Department of Labor and Industry.

3. The Referee shall make an investigation in person or by an Inspector of the Department of Labor and Industry whenever he is of the opinion that such investigation will be of material assistance in determining the matter of fact put in issue by any petition and answer.

4. Whenever the evidence at a hearing is conflicting or insufficient, the Referee may continue the hearing and make an investigation in person or by an Inspector of the Department of Labor and Industry.

5. Where any medical fact is put in issue by a petition and answer the Referee shall apply to the Board, as provided in Section 417, for power to appoint an impartial physician or physicians to examine the physical condition of the petitioner or defendant to the petition and report thereon.

6. When a Claim Petition has been referred to a Referee and the only fact denied in the answer is one which can be more conveniently investigated in another district, the petition may be transferred through the Bureau to the Referee of such other district.

7. When one of the allegations denied in an answer to a Claim Petition is the disability of an employe or the status of a dependent, this question may be referred through the Bureau by the Referee to whom the petition is assigned, to the Referee of any district in which the question can be more conveniently investigated, whose finding thereon when made to the original Referee shall be of the same effect as a finding of the original Referee.

Hearings.

1. The Referee shall hold each hearing at the place, within his district, most convenient to all parties concerned.

2. All hearings before the Board or a Referee shall be open to the public.

3. The object of all hearings is to ascertain the truth of the matter in dispute. The Referee shall see to it that the testimony is fully presented and to that end may examine and cross-examine witnesses.

4. The Referee shall require that both parties and Counsel shall treat all witnesses fairly and courteously.

5. When either a claimant or defendant is not represented by counsel, the Referee shall advise him as to his rights, aid him in examining witnesses and give him all assistance which is compatible with the judicial position of the Referee.

Burden of Proof.

1. The party, who alleges in his petition or answer any fact, not admitted by the pleadings and not ascertained by an investigation made or ordered by the Referee, must produce evidence to prove it.

2. The burden rests upon the claimant or petitioner to establish by a preponderance of probability, upon all the facts proved by the evidence or ascertained by the Referee's investigation, his right to compensation and its amount or his right to such other relief as his petition prays for.

Evidence.

1. The statement of any person, having personal knowledge of any material fact, who is dead or whose testimony before a Referee or by deposition cannot be conveniently obtained, may be received in evidence if the circumstances, under which it was made, are such as to convince the Referee that it is trustworthy.

2. Any conduct or act which shows a fixed habit, or reasonably constant tendency, on the part of any person to act or not to act in a particular way, shall be admitted in evidence to prove that such an act was or was not done by such person on the occasion in question.

3. No physician's certificate shall be admitted as evidence of any controverted medical fact, unless such physician be dead or otherwise unable to testify before the Referee of any district of this Commonwealth or to make a deposition.

4. If a witness resides in a district, other than that to which the Claim Petition is assigned or the question of fact referred, the Referee may order his or her testimony to be taken before the Referee of the District in which the witness resides.

5. No deposition shall be admitted, except by express agreement of the parties, unless the witness resides outside the Commonwealth or it is shown that by reason of illness or other cause, the witness can not give his or her testimony before the Referee of any district of this Commonwealth.

6. If the Referee has made a personal investigation he shall state at the hearing any facts, observed by him, upon which he intends to rely and he shall, if requested by either party, grant a continuance to enable such party to produce evidence to challenge the accuracy of his observation.

7. If a Referee intends to rely upon any statement made to him during a personal investigation, he shall state at the hearing the substance of the statement and the name of his informant, and shall offer to continue the hearing in order that his informant may, if either party so request, be produced as a witness for examination and cross examination. The failure to request such continuance shall be a waiver of all right to the production, examination and cross examination of such informant.

8. Whenever the Referee intends to rely upon the report of any physician, or of any inspector of the Department of Labor and Industry, or any other expert, appointed or employed by him under Section 417, he shall, whenever possible, offer to the parties an opportunity to read such report, or, if this be impossible, shall notify them that he intends to rely on the report of such physician, inspector or expert, giving the name of the physician, inspector or expert and the matter entrusted to him for investigation and notify-

ing the parties that he will admit such report in evidence without requiring the physician, inspector, or expert to attend the hearing, unless one or both of the parties shall make a request in writing that such physician or expert be produced at the hearing for examination or cross examination. The failure to request the production of such physician, inspector, or expert shall be a waiver of any right of examination and cross examination.

Referees Award.

The Referee's Award or Disallowance of Compensation shall be made upon Form W 24, in the following order:

1. Title of case and number of claim petition.
2. Date and place of hearing.
3. Names of parties, their counsel and witnesses.
4. A brief statement of material testimony.
5. Findings of fact
6. Conclusions of law.
7. Award, citing section and clause of the Act upon which the award is based, or giving in full reasons for disallowing compensation.

References on Questions of Facts Arising out of Petitions to the Board.

1. When the answer to a petition to the Board denies a fact or facts alleged in the petition or alleges additional facts, not stated in the petition, the Board may refer such fact or facts to the Referee or Referees of the district or districts in which such fact or facts can be most conveniently investigated.

2. In such case the Referee, to whom the question is referred, shall fix a time and place of hearing and shall give notice thereof to all parties in interest.

3. Where a question of fact arises under a petition and answer as to a change in the disability of an employe or the status of a dependent, it will be referred to the Referee of that district in which the employe or dependent resides or resided.

Appeals and Petitions for the Termination or Modification of Agreements and Awards.

1. An appeal taken by the State Workmen's Insurance Fund or by an employer, who has complied with Section 305, will operate as a supersedeas and will suspend the payments ordered by the Award appealed from, in whole or in such part as the appeal, if sustained, would require. An appeal by an employer who has not complied with Section 305 will not operate as a supersedeas, unless such employer

shall file a satisfactory bond in an amount sufficient to secure the payment of the compensation, due under the award at the date of the appeal and the compensation which may accrue during the pendency of the appeal.

2. The filing of a petition to terminate or modify a compensation Agreement or Award, as provided in Section 426, will operate as a supersedeas and will suspend the payment of compensation fixed in the agreement or by the award, in whole or in such part as the facts alleged in the petition would, if proved, require.

RULINGS OF THE WORKMEN'S COMPENSATION BOARD.

1. The notice required by Section 302(a) notifying the employe of the employer's refusal to accept Article III, of the Compensation Act of 1915, must be personally served upon each employe by furnishing him with a copy of the same, and by informing him of its contents in a language understood by him.

2. No certified copy of any agreement or claim petition will be issued, for the purpose of filing a lien as provided for in Section 429 of the Workmen's Compensation Act of 1915, when the employer is insured in the State Fund and has given notice of an accident within seven days after its occurrence.

3. The Commonwealth and all counties, cities, boroughs, townships, school districts and other governmental authorities created by the laws of this Commonwealth and having the right to levy taxes, shall be exempt from insuring their liability upon application to the Workmen's Compensation Board.

4. All information given by persons, companies, or corporations applying for exemption from insuring shall be considered strictly confidential and nothing contained therein shall be disclosed by any employes or attaches of this office or used for purposes of taxation.

5. All persons appointed by and on the pay-roll of the Commonwealth or of a county, city, borough, township, school board or other governmental sub-division of the Commonwealth are employes of the Commonwealth or of such county, city, borough, township, school board or other governmental sub-division of the Commonwealth for the purpose of compensation.

6. An ordinary private chauffeur while acting as such is engaged in domestic service within the meaning of the Supplement No. 343, 1915, and is therefore, not covered by the Workmen's Compensation Act of 1915.

7. Charitable corporations, colleges, hospitals, etc., being corporations not for profit, are employers within the meaning of the Workmen's Compensation Act of 1915 and if they do not give to their employes the notices provided in Section 302 are liable for compensation under Article III of said Act.

The Board declines to give a ruling as to the liability under Article II of a charitable corporation which rejects Article III, as this question is one for the determination of the Courts and not for the Board.

8. A non-resident alien woman claiming compensation as a dependent widow, may prove her marriage by the official record of the civil marriage or by the church record of a religious marriage.

9. In all cases in which applications for exemption from carrying insurance are made, the applicants will be required to answer the following question: State whether or not it will be your policy to discriminate against any class of employes for the purpose of reducing your liability under the Workmen's Compensation Act of 1915.

10. The term "domestic service" applies only to service in a private home and does not apply to service in a hotel, hospital or other institution.

11. Those engaged in the business of fruit growing, poultry and stock raising, dairying and horticulture, as a business and not merely as incidental to general farming, come under the Workmen's Compensation Act of 1915 and are not exempted by Act 343 of June 3, 1915, which is a supplement to the said Act.

12. It is contrary both to the letter and the spirit of the Workmen's Compensation Act of 1915, for an employer to levy contributions upon his employes, by reducing their wages or otherwise, for the purpose of meeting his liability under the Act.

13. Elective officers of the Commonwealth or of a county, city or any other governmental authority created by the laws of this Commonwealth; and persons paid by the Commonwealth, county, city or other governmental authority for services rendered occasionally in the administration of governmental affairs, such as jurymen, witnesses and viewers, are not employes within the meaning of the Workmen's Compensation Act of 1915.

All appointive officers and subordinates who are paid by the Commonwealth or by any county, city, or other governmental authority, and all other persons performing services for the Commonwealth or other governmental agencies created by it, or for any municipal subdivision thereof, under a contract of hiring, are employes of the said Commonwealth, county, city or other governmental authority within the meaning of the Act.

14. The owner of a threshing machine, doing work on a farm not his own, for hire, is liable to his engineer and those helpers whom he employs to run the machine. The same ruling shall apply to the owner of an ensilage cutter or any similar machine.

LIST OF FORMS.

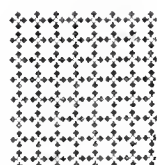
- Form W 1 —Employer's Notice to his Employe of his Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 2 —Notice to Laborers and Assistants not directly employed by the Principal Employer of his Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 3 —Notice to Employer of Employe or Laborer's Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 4 —Employer's Notice of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 5 —Employer's Notice to Laborers and Assistants of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 6 —Employe's Notice of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 7 —Proof of Service of Employer's Notice of his Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 7 a —Proof of Service of Employer's Notice to his Employes in Manner Permitted by Special Order of the Board.
- Form W 8 —Proof of Posting Notice to Laborers and Assistants hired by an Employe or Contractor of the Principal Employer's Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 9 —Notice of Proof of Service of Employe's Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 10 —Employer's Application for the Privilege of Paying Compensation Provided in Article III of the Workmen's Compensation Act of 1915, without Insurance.
- Form W 11 —Order of the Workmen's Compensation Board of Pennsylvania Exempting an Employer subject to Article III of the Workmen's Compensation Act of 1915 from Insuring his Liability to Pay Compensation Thereunder.
- Form W 12 —Notice of Conditional Acceptance of Employer's Application for Exemption from Insurance.
- Form W 13 —Employer's Proof of Insurance under Article III of the Workmen's Compensation Act of 1915.
- Form W 14 —Agreement for Compensation for Disability.

- Form W 14 a—Supplemental Agreement for Termination or Modification of a Compensation Agreement or Award for Disability.
- Form W 15 —Agreement for Compensation for Death.
- Form W 15 a—Supplemental Agreement Terminating or Modifying an Agreement as to or an Award of Compensation for Death.
- Form W 16 —Approval of Compensation Agreement.
- Form W 17 —Disapproval of Compensation Agreement.
- Form W 18 —Employee's Claim Petition for Compensation for Disability.
- Form W 19 —Claim Petition for Compensation by Dependents of Deceased Employee.
- Form W 20 —Assignment of Claim Petition to Referee.
- Form W 21 —Notice to Defendant of Claim Petition.
- Form W 22 —Defendant's Answer to Claim Petition.
- Form W 23 —Referee's Notice of Hearing.
- Form W 24 —Referee's Award or Disallowance of Compensation.
- Form W 25 —Appeal from Referee Alleging Error of Law.
- Form W 26 —Appeal from Referee's Findings of Fact.
- Form W 27 —Appeal from Referee on the Ground of Fraud, Coercion, or other Improper Conduct of a Party in Interest.
- Form W 28 —Notice of Hearing of Appeal.
- Form W 29 —Notice of Hearing of the Case De Novo.
- Form W 30 —Petition to the Board for the Determination of Compensation for Disability under Facts agreed upon by the Parties.
- Form W 31 —Petition to the Workmen's Compensation Board to Determine the Compensation Payable under Agreed Facts to the Dependents of Deceased Employee.
- Form W 32 —Petition for Review of Compensation Agreement.
- Form W 33 —Petition by Employer for Commutation of Compensation.
- Form W 34 —Petition by Employee or Dependents for Commutation of Compensation.
- Form W 35 —Petition for Termination or Modification of Agreement or Award on Ground of Changed Disability.
- Form W 36 —Petition by Employer for Modification or Termination of a Compensation Agreement or Award on the Ground of Change in the Status of the Dependent or Dependents of a Deceased Employee.

- Form W 37 —Notice of the Filing of a Petition for the Review of an Agreement, the Termination or Modification of an Award or an Agreement, or the Commutation of Compensation due under an Award or Agreement, and of the Time and Place of Hearing thereof.
- Form W 38 —Answer to Petition for the Review of a Compensation Agreement.
- Form W 39 —Answer to Petition for the Commutation of Compensation Payable under an Agreement or Award.
- Form W 40 —Answer to Petition for the Modification or Termination of a Compensation Agreement or Award.
- Form W 41 —Notice of the Time and Place of Hearing of a Petition for the Review of an Agreement, the Termination or Modification of an Award or an Agreement, or the Commutation of Compensation due under an Award or Agreement.
- Form W 42 —Reference of Questions of Fact to Referee.
- Form W 43 —Notice of the Hearing by a Referee, to whom the Facts Alleged in a Petition have been Referred by the Workmen's Compensation Board for Determination.
- Form W 44 —Petition for Rehearing of a Question of Fact Referred to Referee.
- Form W 45 —Notice of Hearing of Petition for Rehearing upon Question of Fact Referred to Referee.
- Form W 46 —Notice Granting Rehearing by Board on Question of Fact Referred by it to a Referee and Filing Date Thereof.
- Form W 47 —Petition of Employer for Physical Examination of Employee.
- Form W 48 —Order to Employee to Submit to Physical Examination.
- Form W 49 —Petition of Employer for Further Physical Examination of Employee.
- Form W 50 —Order to Employee to Submit to Physical Re-Examination.
- Form W 51 —Receipt of Compensation Paid under a Compensation Agreement or Claim Petition.
- Form W 51 a—Certificate of the Payment of Compensation under an Agreement or Award.
- Form W 52 —Approval of Claim for Legal Services and Disbursements.
- Form W 53 —Employer's Notice that he has taken out Insurance to cover his Liability to his Employees.
- Form W 54 —Employer's Notice to Employees of Exemption from Carrying Insurance.

WORKMEN'S COMPENSATION DISTRICTS.

- District No. 1—Philadelphia, Delaware, Chester, Montgomery and Bucks Counties. Referees: W. B. Scott, George C. Klauder, North American Building, Philadelphia.
- District No. 2—Berks, Schuylkill, Lehigh, Northampton, and Carbon Counties. Referee: Paul W. Houck, Ulmer Building, 207 N. Center Street, Pottsville.
- District No. 3—Montour, Columbia, Luzerne, Monroe, Pike, Wayne, Lackawanna, Susquehanna and Wyoming Counties. Referee: George W. Beemer, Union Nat'l Bank Building, Scranton.
- District No. 4—Dauphin, Lebanon, Lancaster, York, Adams, Franklin, Cumberland and Perry Counties. Referee: E. K. Saylor, Woolworth Building, Lancaster.
- District No. 5—Tioga, Lycoming, Bradford, Sullivan, Union, Snyder, Potter, Northumberland, Centre, Clearfield, Clinton and Cameron Counties. Referee: W. W. Champion, First Nat'l Bank Building, Williamsport.
- District No. 6—Cambria, Blair, Huntingdon, Mifflin, Juniata, Fulton, Bedford and Somerset Counties. Referee: Jacob Snyder, Mateer Building, Altoona.
- District No. 7—Erie, Warren, McKean, Elk, Forest, Venango, Mercer and Crawford Counties. Referee: L. E. Christley, Walker Building, 7th and Peach Streets, Erie.
- District No. 8—Lawrence, Butler, Clarion, Jefferson, Indiana, Armstrong, Westmoreland, Fayette, Greene, Washington, Beaver, and Allegheny Counties. Referees: Thos. J. Dunn, Chas. H. Young, Hartje Building, Pittsburgh.





How an elevator accident may occur. The entrance gate should always be closed when the elevator car is not at the floor. Otherwise the car may be started from another floor with the result shown in the photographs.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



A BULLETIN OF INFORMATION FOR THE PUBLIC

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THE SIGNIFICANCE OF VITIATED AIR IN INDUSTRIAL ESTABLISHMENTS.

Various agencies act upon the air conditions in industrial establishments, so as to affect seriously the health of the workmen. It may be polluted by dusts of various kinds, by poisonous fumes, gases and vapors; and by the presence of disease producing germs. There may be marked variations in temperature, humidity and pressure; and, finally, the air may become vitiated by the impurities arising from breathing, combustion, lighting and overcrowding within a confined space. These last mentioned conditions are very liable to occur in all indoor industries, whereas the other conditions mentioned are incidental to certain specific trade processes. Vitiating air, therefore, is far reaching in its significance, and merits further consideration.

The earth is surrounded by a gaseous mantle, the atmosphere, or as it is more commonly called, the air. This air reaches a height of over 200 miles and penetrates to a considerable depth into the soil, into caves and mines and into the ocean. The air when pure is without color, taste or smell and is therefore invisible and imperceptible when at rest. It becomes manifest only when in a state of motion, or when our bodies are in action, through the resistance which it offers.

The air we breathe is really a mechanical mixture of gases, possessing the physical properties of weight, expansion and diffusibility. That it is a mechanical mixture and not a chemical compound is proved by the fact that the gases composing the air do not exist therein in their proper combining proportions, and that the relative amounts of these gases in the air cannot be expressed by a chemical formula. Moreover, if one mixes together the gases of which the air is composed in the same proportion as they occur in the air, there is no manifestation of chemical action, such as heat, change in volume or electrical reaction.

The composition of this mechanical mixture per 100 parts by volume has been estimated as follows: Oxygen, 20.76; nitrogen, 78.20; carbon dioxide, 0.04; argon, 1; small amounts of ozone and varying amounts of watery vapor.

Oxygen is the most important constituent of the air, although forming but one-fifth of its volume. This gas when pure is clear and colorless. Growth and development, heat, light and even life itself are dependent upon the oxygen in the air. Remove it, and all forms

of life, both animal and vegetable, would become extinct, and the earth a barren waste. Under natural conditions, the amount of oxygen in the air varies but little, because any localized accumulations are readily distributed through the air by the diffusing action of the air. The greatest variation exists between inspired and expired air; in the former the volume of oxygen present is about 20 per cent., and in the latter, 16 per cent.

Ozone is a modified form of oxygen, and occurs in the atmosphere in small traces. It is most abundant over fields covered with vegetation, over forests and over the ocean; and generally absent from thickly populated districts and in localities where there is much decomposing organic matter. Ozone has powerful oxidizing properties and is produced whenever an electrical discharge occurs in the air. It has a very pungent odor, by which it is easily detected, and is an active agent in the purification of the air from waste organic matter.

Nitrogen is the main constituent of the atmosphere, and as a chemical element is widely distributed in nature, especially in the tissues of plants and animals. It is a colorless, odorless and tasteless gas, incombustible and incapable of supporting combustion or life. Its chief function seems to be that of a diluent of the oxygen, reducing its strength and rapidity of action. Nitrogen also plays an important part in the various chemical processes associated with vegetable life, especially in the soil.

Carbon dioxide, under normal conditions, exists to a very limited extent in the air—3 to 5 parts per 10,000 of air. It is a nonsupporter of combustion and, therefore, acts in an opposite manner to that of oxygen. Carbon dioxide is derived from the decomposition and putrefaction of organic materials by bacteria, from combustion and from respiration. The amount present in the air is subject to considerable fluctuation, according to place and season. It is more abundant in the autumn than in the winter; at night than in the day time. Rain and snow remove considerable from the air. Any localized accumulations are readily disseminated through the agency of the winds.

There is an interesting cycle associated with the maintenance of the oxygen and carbon dioxide according to their relative proportions in the atmosphere. All chlorophyl bearing plants absorb carbon dioxide from the air, take up into their tissues the carbon, and give off the oxygen. The members of the animal kingdom absorb this oxygen, utilize it in performing their body functions, and in turn give off carbon dioxide.

More or less aqueous vapor is present at all times in the atmosphere. Water is constantly evaporating from the earth's surface into the air, and the amount of moisture which the air can hold is constantly

varying with the temperature. When the air is so full of moisture that it can contain no more, it is said to be saturated; and in proportion as it is more or less removed from the point of saturation, is air said to be dry or moist. As a rule, the atmosphere contains from 50 to 75 per cent. of the amount required for complete saturation; if the quantity varies much above or below these limits, the air becomes unpleasantly moist or dry. The evaporation of moisture from the lungs and skin regulates the body temperature, by removing heat from the body. If the relative proportion of aqueous vapor be increased, the escape of water from the body will be hindered; and when a high temperature is associated with this condition, the heat is much more oppressive than when the air is dry and favors free evaporation. Then, again, a cold moist air is much more distressing than when the air is dry and warm. We all have experienced the peculiarly unpleasant effects of a moist and hot atmosphere, and the invigorating influence of dry and crisp air.

The air being merely a mechanical mixture of gases, behaves exactly as, and has the physical properties of, a gas. It, therefore, has weight, expansibility and diffusibility.

Like any solid or liquid, air has weight. From experiments, it has been proved that 100 cu. in. of dry air, when the barometer registers 30 in. and the thermometer is at 60°F., weighs 31 grains. Since the air has weight, it, therefore, exerts pressure according to the same laws, as those governing the pressure of liquids; this was first determined in 1643 by Torricelli, a pupil of Galileo. At the sea level, this pressure amounts to 15 lbs. per sq. in., and is sufficient to support a column of mercury 30 in. high. This pressure varies according to the altitude of any given locality, and also in the same locality at different times, according to its temperature and humidity. These variations in pressure are measured by barometers. Unless extreme, variations in pressure seem to have only an indirect influence upon health; but when reduced some inches, as in mountain climbing and balloon voyages, or much increased as in diving bells and caissons, marked effects are produced upon both the breathing and the circulation.

Air also possesses the property of expanding and contracting according to certain physical laws, depending upon the temperature and pressure. This expansibility of the air plays an important part in the ventilation of buildings. Whenever a room or building is occupied by people or warmed by lights or fires, a constant expansion of air is going on, and this expanded air escapes by the windows, doors and crevices in the building.

Diffusibility is also a property of the air, and the rate at which the gases of the air intermingle depends upon their weights or den-

sities. By this property, the composition of the air is kept fairly constant, and the carbon dioxide, which is found in abundance in our large centres of population resulting from combustion and respiration, is removed from its point of origin to such places where vegetation and sunlight can break it up into carbon as food for plant life and oxygen for the maintenance of animal life.

The impurities in the air of workrooms and their effects upon the health of the workmen may be considered under three heads.

1. Vitiating by Respiration. The following changes are found in air that has been breathed out from the lungs:

- (a) The oxygen content is reduced from 20% to 16%.
- (b) The amount of carbon dioxide is increased from 0.04% to 4 or 5%.
- (c) The temperature is raised to that of the body—99.4°.
- (d) The volume of the air is increased, because of the increase in temperature.
- (e) Marked increase of watery vapor, often to saturation.
- (f) The nitrogen is usually increased.
- (g) Addition of putrefiable organic matter.

The continuous breathing of air fouled by human beings tends to produce a lowered state of health and promotes the onset of disease. Recent experiments have demonstrated that the usual symptoms complained of in overcrowded rooms are traceable to the physical changes in impure air. These physical changes are deficiency of oxygen, excess of carbon dioxide, increased temperature and humidity, and organic matters given off by the lungs and skin.

The prolonged breathing of vitiated air of this character tends to produce a lowered state of vitality, characterized by anemia, dyspepsia, deficient nutrition and general weakness. People in this lowered condition of health, which is very common among indoor workers, are unable to resist attacks of acute disease and fall an easy prey to all chronic and wasting diseases. Such conditions obtain in many workshops, where, in addition to breathing impure air, sedentary occupations interfere with the normal function of the body. The prevalence of certain lung diseases in those constantly breathing impure air seems to bear some relation to the degree of purity of the respired air. This causal relationship between foul air produced by overcrowding and deficient ventilation is now generally recognized.

Short exposure to extreme degrees of vitiation in overcrowded and ill-ventilated rooms is no less harmful to health. It manifests itself by the onset of acute symptoms—headache, dizziness, nausea and vomiting. In extreme cases, death may result from marked deficiency of oxygen and high content of carbon dioxide.

2. Vitiating by Combustion. The products of combustion of coal gas, where gas is used as an illuminant, and from coal burned in stoves for heating, escape into the surrounding atmosphere, and, in crowded workrooms with inadequate ventilation, serve to intensify the ill effects on health of air already vitiated by respiration. Air thus contaminated, when inhaled continuously, produces headache, digestive disturbances, anemia and general depression; and in severe cases fatal intoxication.

These combustion products exist in the air in the form of gaseous impurities, the most important of which are carbon dioxide, carbon monoxide and sulphur compounds.

Of the carbon compounds found as impurities in the air, carbon dioxide represents the main impurity due to combustion and respiration. The proportion of oxygen is at the same time diminished, because considerable oxygen is consumed by the combustion process. Hence smaller amounts of carbon dioxide will produce poisonous effects. With a corresponding reduction of oxygen, 5 per cent. of carbon dioxide renders air sufficiently poisonous to destroy life; 2 per cent. produces severe suffering; 1 per cent. causes great discomfort, while 0.1 per cent. is recognized by a sense of stuffiness.

As the proportion of carbon dioxide in the air is easily and accurately determined, and as it bears a more or less constant ratio to the other impurities especially the organic, its estimation in a confined air is usually accepted as an index of purity of the atmosphere and of the efficiency of ventilation methods. For this purpose, an air is condemned as being vitiated, if it contains more than 6 parts of carbon dioxide per 10,000 part of air.

Carbon monoxide is the chief poisonous constituent of the gases given off from illuminating gas, open fires, defective flues and blast furnaces. It is a powerful narcotic poison, and exerts itself in an insidious manner; for being without odor and non-irritating to the air passages, it may be breathed unconsciously by the victim, who quickly loses the power of movement and the desire to escape from the poison. Small quantities cause headache, dizziness and quick insensibility; larger quantities, unconsciousness and paralysis of the heart. Carbon monoxide produces its fatal effects by displacing the oxygen in the red blood cells. It thus causes asphyxia by destroying the power of the red blood cells carrying oxygen to the tissues. It also forms a stable compound with the pigment of the blood cells. Therefore, the symptoms of poisoning are very persistent and the outcome usually fatal, when the amount of gas inhaled has been at all considerable.

Sulphur compounds are added, in varying quantities, to the air by combustion processes, and are easily detected by their disagreeable

odor. In acute cases, they produce symptoms of a narcotic and convulsive poison; in chronic cases, those of anemia, and general debility.

3. Vitiatio'n by Suspended Matter. The particles which make up the suspended matter in the air are of the most varied character; some are organic; some inorganic; some absolutely harmless, and some really harmful. Except on the mountain top or out at sea, it is difficult to find an atmosphere entirely free from this suspended matter, while in cities and factories, the air is usually heavily charged with many solid particles. Chief among these suspended matters of the air will be found fine grains or particles, inorganic or organic in nature, constituting what is commonly known as dust. The long continued inhalation of dust is a real menace to health, for various diseases of the lungs especially consumption, have been traced among certain classes of workers, as being due to the inhaling of dusty particles generated in these particular trade processes. For example, among grinders lung disease is prevalent, due to the inhalation of fine metallic particles. Similarly among potters, an asthmatic cough is often developed in consequence of the continual breathing of fine clay dust. The makers of cement and grindstones suffer in the same way. In white lead works, the dust gives rise to colic among the workers, while workers in brass foundries are subject to ague—like paroxysms. In the carding rooms of cotton, wool and silk mills, the fine dust from the fabrics is often so great and so irritating in nature, that considerable ill health results therefrom among those employed therein.

How far these suspended impurities in the air will affect the public health depends not so much upon their quantity as upon their quality and nature, although, in some cases, consideration of the former must not be neglected. The most injurious particles are those which are hard, angular and sharp; because of these physical properties, they become impacted in the walls of the bronchial tubes or the air cells of the lungs, are expectorated with difficulty, and set up irritation and chronic inflammation of the surrounding tissues. Soft and rounded particles are not capable of doing nearly so much mischief.

Besides dust, the air contains other solid particles in the form of debris of all sorts, emanations from the body and myriads of germs of vegetable organisms, moulds, etc., which may be the means of spreading disease. Thus infectious matter from a poisoned wound may be scattered about in careless fashion, and by contact infection propagate itself on new soil. In coughing, sneezing and loud talking, small particles of mucus and moisture from the nose and mouth, which contain numerous bacteria, are sprayed into the air. In this manner, infectious organisms of nasal and throat catarrhs, of influ-

enza, of diphtheria, of pneumonia and of tuberculosis are ejected from the air passages and may be the means of propagating these diseases.

Moreover, the dust laden air may be further contaminated by poisonous vapors, fumes and gases generated in certain trade processes, which are influential factors in the causation of the malhygiene of industry.

Ventilation is the means by which the purity of the atmosphere is kept under control. It implies the removal and dispersion, by a supply of fresh air, of all the impurities which have accumulated in the air as the result of the vitiating processes already described. For this purpose various methods have been employed which may be classified under two heads—natural and artificial ventilation.

Natural Ventilation.—This is carried on by diffusion of the air, winds, and movements of the air due to inequalities in temperature. These manifestations of physical forces usually obtain in small buildings, and in other places where few persons are assembled; but they are effective only to a limited extent. Natural ventilation alone is rarely sufficient and usually needs to be supplemented by artificial means, especially in large buildings, where many people are assembled.

Artificial Ventilation.—Under this heading are included methods of extraction of air from inhabited buildings by means of heat, steam and fans; and methods of propulsion of air into buildings by mechanical means. The former is called the vacuum system and the latter, the plenum system. In the ventilation of factories, steam may often be economically utilized as the extraction force, but extraction by fans is also largely used, and with considerable advantage, as the amount of draught can be regulated with nicety by altering the speed of the fan. In the plenum system, air is constantly driven into the rooms, under a slight pressure, which causes it to escape through the various openings in the buildings, or through special openings communicating with exit shafts.

Special arrangements are required to remove the dust generated in certain trade processes. Where large quantities of dust are generated, as in grinding, polishing and sawing, the dust can be aspirated, at its place of origin, into a suitable pipe connected with an exhaust fan. Where such a method is not feasible, water may be used to render the material damp, and thus prevent the formation of dust.

On the whole, the advantages of artificial ventilation are great, being mainly due to its facility of management, and constancy under varying conditions. For factories and work shops, and wherever there is machinery, artificial ventilation, whether by extraction or propulsion, is certainly the most convenient and economical. Each

system has its advantages and disadvantages, and often the requirements can be met by a combination of the two systems. Each case, however, must be considered intelligently on its merits, as no hard-and-fast-rule can be laid down.

**WORKMEN'S COMPENSATION, INDUSTRIAL DISEASES AND
ACCIDENT PREVENTION DISCUSSED BY PHYSICIANS
FROM INDUSTRIAL PLANTS ATTENDING CON-
FERENCE HELD BY DIVISION OF IN-
DUSTRIAL HYGIENE AND
ENGINEERING.**

Forty-three physicians and surgeons, representing the safety and welfare departments of great industrial establishments in all sections of the Commonwealth, attended a conference held at the State Capitol, February 17, under the direction of the Division of Industrial Hygiene and Engineering of the Department of Labor and Industry. The discussions dealt with, industrial diseases, workmen's compensation and accident prevention.

Dr. Francis D. Patterson, Chief of the Division of Industrial Hygiene and Engineering, presided at the sessions and outlined, in detail, to the physicians, the laws of Pennsylvania as they relate to the physical welfare of the workers in industrial plants.

In addition to the papers read as a part of the regular program, which was published in full in the March Bulletin, the impromptu discussions brought from many of the attending physicians important facts and view-points on various subjects.

Dr. Patterson in outlining the purposes of the conference said:

"The intention is to have these conferences four times a year and it is hoped to make them so interesting to everybody that you will look forward to them. The next conference will be held, probably in May and the following tentative subjects have been selected for that meeting:

First, Dust and fumes, foes to industrial life.

Second, Effect of extreme heat as a factor in impairing the efficiency of the working man.

Third, The value of physical examination as a factor in the prevention of industrial injury.

"These subjects are only suggested as ones which appeal to the largest number of physicians. I am trying to make the subjects for these meetings so general that all of us can find profit in what is said. This program is purely a tentative one and I will be glad to have suggestions as to other topics that we might take up."

Dr. McAlister's Address.

Dr. John B. McAlister, of Harrisburg, President of the Pennsylvania State Medical Society, was invited by Commissioner John Price Jackson and Dr. Patterson to make the address of welcome to the visiting physicians. Dr. McAlister gave interesting comment on the Workmen's Compensation Act. He said in part:

"I am pleased to have this opportunity to say before you men what I believe should be the attitude of the physicians and organized medicine towards the Compensation Board, because you represent various communities, and if you are in accord with my views, you can greatly help to spread throughout the profession an attitude of friendliness and co-operation for the Compensation Act.

"I shall not discuss the principles of compensation except to remind you that the basis of all Workmen's Compensation Laws is the principle that the economic cost of the industrial accidents should not be met by the employer or by the workmen alone, but should be assumed by each in fair proportion. This loss should be distributed over the entire cost of the industry, and ultimately be paid in a manner as to cause the least possible disturbance to the trade or business concerned. The mistaken attitude assumed by many toward Workmen's Compensation in the early days of its discussion has been modified in the light of its successful working wherever it has been tried. Today many former opponents stand ready to lend their help in the accomplishment and enforcement of the provisions of such a law. It is not too much to hope, I trust, that the physicians, although they do not hail this law with unspeakable joy, will co-operate with the Compensation Board in every possible way.

"The Workmen's Compensation Act is now a law of this State. We are living and working under this law and must abide by it. This revolutionary enactment is regarded by some economists as the most important one since the emancipation of the negro through the Civil War. Such a revolutionary movement will not be innovated nor administered without innumerable mistakes and misapplications. These will be greatly minimized if the members of the medical profession exercise careful judgment and unflinching loyalty to each other. It is not a law requested by the medical profession nor is it a law opposed by it. Nevertheless, it is a statute which, in the opinion of our legislators will yield the greatest amount of good to the greatest number of our citizens. That should be enough for the physicians of the State of Pennsylvania. If it is to the benefit of our patients,

certainly it should be to our interest. It is not intended to injure us and we should endeavor to have the law administered in harmony with the interests of our profession. The Workmen's Compensation Board has passed a resolution as follows:

"Resolved, That the Compensation Board will welcome any friendly co-operative advice and aid from the State Medical Society in aiding to develop and carry out the work under its direction."

"This shows a decided disposition to administer the law fairly to us, and the Board fully appreciates the necessity of the support of the medical profession if their work is to be a success. Mistakes will be made and the Compensation Board realizes that they will make mistakes. But I believe they will be corrected as they develop. We are concerned not only in the law but the administration of the law.

"In self defense we must, of course, have due regard for the financial side of the law, and of which, I believe we are agreed, that the returns are too meager. But we must remember that this law was passed in a period of financial depression when the future looked gloomy and discouraging to the employers of labor. The law drafted at that time endeavored to keep down the compensation and all the compensation features were made correspondingly low. Our profession has always made much of its altruistic motives and rightly so and we must not now make too prominent our objections to the law because of the financial returns. I believe if we accept it as gracefully as possible for a time, and if the compensation to the hospitals and physicians is not sufficient, that at the next session of the Legislature, there will be a united request by the Workmen's Compensation Board, hospital management, and the medical profession for proper recognition that can not and will not be ignored. Then, too, we must remember that now there will be sure compensation for much work that heretofore has been done by the hospitals and physicians as pure charity. A large majority of these accident cases were treated at hospitals free of charge. Now the industry pays these charges. Many who went to physicians' offices were able to pay little, if anything; now the law requires the employer to pay a reasonable sum for the physician's services.

"Some European countries having longer experience have generously enlarged their medical funds, realizing that the best of medical aid and medical attention bring a tremendously increased return in rapidity of recovery, and economy in compensation and further medical aid.

"Let us pledge ourselves to meet the many problems and complications which will surely arise in the administration of the law with a spirit of fairness and desire to co-operate. Let us too, at the

same time, regard these problems as a business proposition in which we must be fairly and justly treated as individuals and as members of a profession. The profession and the Board must work close together and only through our strength and loyalty to each other can our individual interests be properly protected. We should keep ourselves informed of any acts of unfairness or injustice that may develop so that we may collect this data to act in the interests of the profession. When so many of the States have such an act and its provisions are working successfully for all concerned, why should we be looking for trouble before any exists. Let us apply our brains to the smoothing out of whatever wrinkles the act may create and thus make it a better instrument for our profession and the people depending upon it.

"We want to take our part in keeping Pennsylvania high among the states which have advanced in hygienic conditions and keep efficient our population so largely engaged in dangerous or extra hazardous pursuits, and especially the lives of vast bodies of men who work in coal mines, steel mills, railroads and other pursuits in which there is more than an ordinary amount of risk and hardship.

Address by Dr. Bricker.

Dr. Elizabeth B. Bricker, Medical Inspector of the Division of Hygiene, of the Department of Labor and Industry, read the following paper on the subject of Asphyxiation and Resuscitation:

There is in actual practice such a slight shade of meaning between the two words asphyxiation and suffocation that they may well, in this present discussion, be considered as one and the same thing.

The three main conditions in which these accidents may occur are in drowning, in electric or traumatic shock, and in gassing, by which latter term is meant the inhalation of a gas which cuts off entirely or which diminishes to so great an extent the amount of oxygen taken into the lungs that the act of respiration is inhibited.

While drowning is responsible for almost twice as many deaths as are the other two conditions combined, it is nevertheless to them, that our attention at this meeting must be especially directed, for it is these causes that play such a serious part in the industrial accidents, not only in Pennsylvania but also throughout the entire country. It is true that drowning does occur under some circumstances in connection with the industries. The number of deaths, however, reported from this cause is very largely overshadowed by the number of deaths from drowning occurring under other circumstances.

Although we are, to a certain extent, concerned with the cause and the prevention of all these accidents, such considerations are really more within the province of the safety engineer than they are the business of the plant physician. The treatment is however

something which is up to the doctor and for which he alone is responsible, whether it is the treatment administered by him individually or by the first aid men whom he has instructed.

Much has been written upon the subject of resuscitation from asphyxiation and suffocation and the purpose of this paper is not to offer anything new on the subject. A resumé of several of the methods which are at the present time, being so strongly advocated by some, and just as strongly opposed by others, is here presented in order merely to open a discussion upon this subject.

So many of these accidents have occurred in the past, and will continue to occur in the future, so far removed from ready access to mechanical devices for resuscitation, that for this reason alone, adequate instruction in the manual methods of producing artificial respiration can never be abandoned.

While the Silvester, the Marshall Hall and the various other manual methods have each in turn served their days as the best methods, they have all been supplanted, except under exceptional circumstances, by the Schaeffer or prone pressure method. With the arms extended, the exchange of air in the Schaeffer method is very much greater than in any other manual method. This fact, in itself, is of sufficient importance to recommend it above all others. Add to it, however, the ease with which it can be administered by a single individual, unaided and practically unskilled; the tremendous relief from the necessity of giving attention to the tongue, that unruly member, which in states of arrested respiration so many of us have found to our discomfort, to be even more unmanageable than the scriptures would imply; and the absence or extreme remoteness of possibility of fracture of the ribs or injury to the liver; one or the other of which is a matter for very serious consideration in the other manual methods, it would seem that no one should hesitate, but at once accept the Schaeffer method as the very best manual method for producing artificial respiration.

The mechanical devices to be considered in this paper are the pulmotor, the lungmotor and the production of artificial respiration by the use of the Meltzer method.

The pulmotor and the lungmotor are very extensively advertised by the firms supplying them. The results achieved through their aid are given wide publicity in the newspapers. They have been purchased by police departments, fire departments, gas and electric light companies, in every one of which organizations, the public in general feels a very vital interest. It is therefore only a matter of course to hear the merits of these instruments discussed freely by people who have scant information concerning the principles of their construction and much less knowledge of their action upon the delicate tissues of the body.

The claims of superiority as put forth by manufacturers of the pulmotor are that it is absolutely automatic; that it always administers oxygen with the air; that there are no complicated inter-tracheal tubes to be adjusted; and that as soon as a pressure of .29 of a pound per square inch is developed in the lungs the exhaust action is automatically started and continues until a predetermined vacuum pressure is reached.

These claims are met by the following objections: the percentage of oxygen in the air-oxygen mixture is fixed at approximately 26.75, an increase of less than 6 per cent. above the amount of oxygen contained in atmosphere air; it is often desirable, especially in cases of carbon monoxide poisoning to administer pure oxygen. What assurance is there that the air does not enter the stomach instead of the lungs? Is there any guarantee that the lungs have really been inflated when the pressure of .29 of a pound per square inch is reached, or may there be an obstruction in the upper bronchi or trachea which thus allows such pressure to be indicated and an erroneous impression of the efficacy of the instrument to be given? It is of a delicate mechanism, which may mean failure at a critical moment. The alternative of keeping on hand constantly, a large supply of oxygen, or of having a piece of apparatus possibly inoperative when it is most needed is always to be considered. But the most serious objection from a physiological point of view is the fact that it removes the air by suction, a process very unlike the natural expiration and one in which may occur, collapse of the air vesicles which cannot be overcome with the succeeding inflations.

The advantages adduced for the lungmotor are that it allows air, or oxygen, or a mixture of the two in any proportion, to be administered; that it is not automatic in action, but at all times under the direct control of the operator; that it is readily adjusted for varying lung capacities; that there is no possibility of air being forced into the stomach instead of into the lungs. All of these claims seem to be well borne out, but the chief objection to this instrument as the pulmotor is the suction created in removing the air from the lungs. Because of this action which differs so widely from the natural process and which exerts upon the lungs a force to which the alveoli are so unaccustomed, it is difficult to measure the amount of damage that may be accomplished particularly if suction is carried on over a long period of time.

In justice to both of these devices, it must be stated that they have undoubtedly been used in hundreds of cases of arrested respiration with apparently excellent results. Many men are living today who attribute their rescues to the pulmotor or the lungmotor. If in these instances the lungmotor had been used instead of the pulmotor,

or the pulmotor instead of the lungmotor, or if neither had been used and manual methods of artificial respiration alone had been resorted to, would the results have been different? Who can say?

A third mechanical method of artificial respiration has been devised by Dr. Meltzer, head of the Department of Physiology and Pharmacology of the Rockefeller Institute for Medical Research. Recommended by the American Medical Association and acting as a member of the Committee on Resuscitation from Electric Shock and also as a member of the Committee on Resuscitation from Mine Gases, Dr. Meltzer carried out a long series of experiments on pharyngeal insufflation as a method for producing artificial respiration. This apparatus feeds, either air or oxygen directly into the mouth and nose by means of a tightly fitting mask; or it may be led directly into the pharynx through a tube of such size and shape that the air is prevented from escaping through the nose. Air is prevented from entering the stomach in large quantity by heavy weights fixed so as to compress the abdomen. Air from a foot bellows, or oxygen under pressure, the supply of both being regulated by a safety valve, is allowed to enter the pharynx through the mask or the pharyngeal tube. As all other avenues of escape, except the trachea are closed, the entering air or oxygen must apparently enter the lungs. To remove the air a valve is turned which at the same time that it shuts off the supply of oxygen or air, allows free exit for the air in the lungs. This air is not removed by suction, only by the natural recoil of the parts that have been expanded by the entrance of the air or oxygen.

This apparatus overcomes the objection offered to all other mechanical devices for artificial respiration—the withdrawing of the air from the lungs by suction. It has been deemed of sufficient merit to be recommended by the Committee on Resuscitation from Mine Gases, for use in all cases of suspended or inadequate respiration. This recommendation was made eighteen months ago.

RESPONSIBILITY FOR ACCIDENTS.

In reading much that has been written on the subject of industrial accidents one cannot help but be impressed with the weight of testimony that claims that by far the greater portion of these accidents are caused by carelessness and that, chiefly on the part of the one who suffers the most. While this is in a sense true, yet the fact remains

that sometimes a remote cause is frequently overlooked, as is also the fact that the accident could not have occurred, even if carelessness on the part of the sufferer existed, if the remote cause had been removed. Take for instance the case of an unguarded gear. A workman might have been working in such a careless manner around this gear that he eventually was seriously injured by being caught in it. Naturally the cause of the accident would be judged by most persons to have been carelessness. It would not, however, be fair to stop there, as it can readily be understood that even if the employee had been careless, the accident could not have occurred if the gear had been guarded. Who then was responsible? Some would say the worker as he was not careful. Others rightly could blame the management because such a condition had been allowed to exist.

The same situation arises every time a serious accident occurs through the agency of inflammable or explosive material used by manufacturing establishments. Primarily the explosion, which usually has such destructive results, is caused by the carelessness of some individual. The fact remains, however, that a condition has been allowed to exist which needed only a careless act to "touch it off." The responsibility then of managements of such types of establishments is a very great one and one which demands constant and careful attention. Orders may be given in a certain factory to foremen or employees that dangerous conditions shall not be allowed to exist, and in addition to this, all kinds of instructions may be given regarding the using of material in a certain way. The matter is then dropped and in many instances forgotten under the press of other important duties. That is just where the difficulty is. Not only should these men have been told not to do things in certain ways but frequent observations at irregular periods should have been taken to see that these instructions were being carried out to the letter. If a certain product requires an especially detailed or intricate process of manufacture, the neglect of any one step of which might result in an inferior product, the manager not only gives orders concerning the individual steps to be taken but he also goes further and sees that these orders are carried out to the letter. Just so is it necessary for the manager of an establishment using inflammable or explosive materials to establish certain precautions which should be followed and observed at all times, not only when business is slack but also when the cry is "Production!"

The necessity for following up the matter in this way is readily understood when it is recalled that during investigations into accidents of this kind the excuse is often heard, "I told them not to do that work in that manner; I told the men not to have that fire

there" or "I prohibited smoking in that building." When pressed further for detailed information, the admission is usually made that no systematic effort was made to see that the orders were obeyed.

The safety of the employe is of far more importance than anything else and even if the employe should overlook this fact the man in charge should not lose sight of this responsibility.

The owner, the manager, or the superintendent should accordingly ask himself these questions:

"Are all reasonable precautions being used?"

"Have I installed suitable and safe apparatus for the performance of this dangerous but necessary process?"

"Can any other method or process be used which would do away with the dangers incident to the one now in use?"

If the first two can be answered in the affirmative and the last in the negative, the persons in authority can feel that they have done their full duty.

FIRST AID FOR INDUSTRIAL ACCIDENTS IN RELATION TO MEDICAL PRACTICE LAW.

There can be no question as to the value of prompt first aid for all industrial injuries. It is a fact that if this first aid be intelligently, as well as promptly, administered, the danger of septic infection in every accident is reduced to a minimum. The supervening of septic infection in any accident case results in a serious loss to the injured man, to the plant which employs him, and to the Commonwealth at large. The injured man, not receiving any compensation during the first two weeks of his disability, loses the wages which he otherwise would have earned. The industry loses his skilled services and in consequence the output of the plant may be decreased both in quantity and in quality. The Commonwealth suffers because one of its citizens, instead of being engaged in productive labor, is possibly a patient in a State Hospital at the expense of the Commonwealth.

In view of the vital importance of first aid, it is only proper that the State should throw a protecting cloak of law around the subject and so assure that this first aid is being administered to the best interest of every one concerned.

Soon after the first of the year, it was called to the attention of the Bureau of Medical Education and Licensure of the State of

Pennsylvania that certain concerns were avoiding the Medical Practice Act, of June 3rd, 1911, by the employment of unlicensed persons to give medical and surgical attention to their injured employes, and render service such as may be rendered only by one licensed to practice medicine in this State. Accordingly Dr. John M. Baldy, President of the Bureau, called the attention of the Department of Labor and Industry to these violations and communicated the following facts to the Department:

"The head of the medical department of any industrial or commercial plant must be a licensed physician of this State.

"It is not permissible for either an unlicensed assistant or a nurse to in any way alter the treatment until the order to do so has been given by the licensed head of the department.

"It is legal in Pennsylvania for any one, licensed or unlicensed, to apply first aid to an injured person; but it follows as a pre-requisite that the licensed head of the department must see this patient at his next visit and direct the future treatment.

"It is not permissible for an unlicensed assistant or a nurse to perform any type of surgical operation.

"'First Aid,' is to be construed as meaning the rendering of only such services as will contribute to the safety and comfort of the injured, until he or she has the opportunity of consulting a licensed physician.

"The attention of industrial and commercial plants is called to the fact that violations of this Act are subject to severe penalties."

This Department desires to call the attention of every manufacturer and employer of labor within the State to these most important facts mentioned above. The practice of some plants in having first aid men treat a case from the beginning to the end without the case being seen by a licensed physician is not only a violation of the law but in some instances has resulted in serious harm to the injured man.

First aid boxes should be used in plants simply to furnish facilities for prompt treatment immediately after the injury occurs, but all subsequent dressings, or change in treatment should be under the actual supervision of a licensed medical practitioner, and all employers of labor should carefully note that the law requires that this should be done and that the Bureau of Medical Education and Licensure emphasizes that if this is not done, severe penalties may follow.

MOTION PICTURES USED TO DEMONSTRATE SAFE PRACTICES.

The Department of Labor and Industry has recently inaugurated a new system of interesting employers and their employes in the matter of accident prevention. When it was realized that approximately 350 employes lost their lives and 38,000 were injured in the industries of Pennsylvania during the first two months of this year, it was thought necessary to start an educational campaign which would be of aid in helping to stop this awful slaughter.

Accordingly, it was decided to hold experimental safety meetings in Harrisburg and if these should prove successful, to continue them in various sections of the State as time and facilities would permit.

A number of the heads of the leading industries of Harrisburg were consulted and asked if they would co-operate in holding meetings which were intended to interest employes in the matter of accident prevention. The employers were asked to help pay the expenses of such entertainments by procuring the hall, and the Department would furnish motion pictures and slides showing how accidents have occurred. Without exception, the employers who were asked agreed to co-operate in the movement and beginning on February 29th a series of six meetings was held on various evenings during the following two weeks.

Through the courtesy and efforts of the National Safety Council a large number of motion picture reels on accident and prevention, were obtained from the United States Steel Corporation, the Eastman Kodak Company, Rock Island Railroad Company and the Pacific Electric Railways Company and films were also obtained from the United Gas Improvement Company and the Bethlehem Steel Company.

Besides the motion pictures which were shown depicting safe and unsafe practices and lessons in fire prevention, many slides were also shown which urged employes not only to guard their own safety but also to guard the safety of their fellow workmen. Scenes showing ways in which accidents have occurred were also exhibited and suggestions were offered for good housekeeping and safe practices. Copies of the following announcement were distributed at the beginning of each meeting:

"These pictures which will be shown to you this evening are given by the Department of Labor and Industry co-operating with your employers who have helped share the expense of this entertainment in an effort to interest you in the matter of accident prevention.

"Since January 1st about 350 persons have been killed and over 38,000 have been injured in the industries of Pennsylvania. Have you ever stopped to consider how great a waste of human energy and money, besides untold suffering to the injured persons and their families, is involved in this fearful slaughter? The compensation, which these injured persons will receive as a result of the Workmen's Compensation Act recently passed by the Legislature and which became effective January 1st, 1916, will never fully repay them for the wages which they have lost and will in no way alleviate the suffering which they and their families endure.

"Investigations have proved that approximately three-fourths of such accidents can be prevented. Will you not enlist in the Safety Movement and do all in your power to prevent this awful loss of life and this large amount of human suffering? Not only do this yourself, but urge your fellow worker to do the same, as his or her carelessness may result in injury to yourself. Carelessness should be eliminated from the factories of Pennsylvania."

The attendance at these meetings and the interest shown by those who saw the pictures demonstrated conclusively that this method of promoting interest of the public at large in accident prevention, is a good one and the Department intends to continue these meetings in every locality where the co-operation of manufacturers can be obtained to the extent outlined above.

Since the experimental meetings held in Harrisburg during the early part of the month, similar meetings have been held with great success in Hershey, Millersburg, Bloomsburg and Middletown.

Any interested persons who desire to have such meetings held in their own locality are requested to communicate with the Division of Industrial Hygiene and Engineering, Kunkel Building, Harrisburg, under whose direction these safety meetings are being conducted.

AVOIDABLE ACCIDENTS CONSPICUOUS AMONG THOSE INVESTIGATED BY BUREAU OF INSPECTION.

The fact that a large number of the accidents occurring in the industries throughout the State are due to carelessness, is brought out very clearly in the reports that are reaching the Department every day.

A few examples of the practices that make these accidents possible are given here. They illustrate very clearly that the dangers thought most trifling are in reality the ones that cause the greatest number of injuries, because their apparent insignificance is the very thing that causes so little care and thought to be directed towards their prevention.

* * * * *

A man wearing gloves was running a rip saw. One of the gloves caught and his hand was drawn into the saw, necessitating the amputation of three of the fingers of his right hand. Another man, also wearing gloves, was drilling a hole in a block of wood. The gloves caught in the drill and the little finger on his left hand was torn off at the second joint.

If these men had not been wearing gloves while working, these accidents would not have occurred.

* * * * *

An employe in a curled hair establishment was given explicit orders not to replace belt on pulleys while the engine was running. Three minutes later he disobeyed the order, the edge of his loose sweater was caught and he was swung around the shafting. In addition to severe bruises of the body, his left arm was completely torn from its socket, his right arm very nearly torn off and his left leg badly battered.

This accident would not have happened, if the man had obeyed orders. The fact remains, however, that torn, ragged or loose clothing should never be worn by those working about machinery in motion.

* * * * *

A man endeavoring to move a coal car over the proper coal bin found the brake of the car very tight. In endeavoring to release the brake he used a wooden bar which broke, causing him to fall from the car. As a result of the fall his skull was fractured and he died in a few hours.

* * * * *

A conductor of one of the trolley companies of the State, after storing his car in the barn at the end of his run, walked into the car pit. A broken arm, a laceration of the thumb and bruises on his head and his hip resulted.

A poorly lighted car barn and car pits not provided with proper covers caused this accident—carelessness again, but this time not on the part of the injured man but on the part of the employer.

* * * * *

In the plant of a large tanning company, one of the men was engaged in operating an extractor wheel. He wished to remove a plug which was not accessible in the position in which the wheel happened

to be resting at the time. To bring the plug nearer, he threw the shifter which started the wheel revolving. He then reversed the shifter and without waiting for the wheel to come to a dead stop, attempted to reach the plug and remove it. He was carried around and crushed to death between the wheel and the supporting timbers.

This example illustrates the great danger always present in attempting to alter, clean or repair machinery in motion.

PLANS APPROVED BY BUREAU OF INSPECTION FOR WEEK ENDING FEBRUARY 12, 1916.

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Sunbury, ... Hollidaysburg, ...	Apartments, ... School, ...	National Fdy & Supply Co., Lancaster Mach. and Struc. Works.	S. Lee Wood.

THEATRES.

Braddock, ... Erie, ...	Colonial, ... M. P. T., ...	Shutts & Morrison, ...	John Sarver.
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SUMMARY.

Fire escapes, ...	2
Theatres, ...	2
Total, ...	4

PLANS APPROVED WEEK ENDING FEBRUARY 19, 1916.

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Sayre, ... Shamokin, ... Harrisburg, ... Bethel Station, .. Mine Three, ... Millvale, ... Braddock, ... Kane, ... Gastonville, ... Blakely Borough, .. Carnegie, ...	 Factory, ... Apartments, ... School, ... School, ... Office, ... Factory, ... Hotel, ... School, ... School, ... Lodge hall, ...	Letts & Austin, ... Geo. W. Anne & Son, ... Potts Mfg. Co., ... P. Rieseck, ... P. Rieseck, ... P. Rieseck, ... P. Rieseck, ... Erie City Fence & Iron Co., P. Rieseck, ... Scranton Iron & Steel Co., P. Rieseck, ...	Simon Glaser. Shamokin Lumber Mfg. Co. Wm. E. Jones, Agt. Bethel Twp. School Board. Bethel Twp. School Board. C. W. Dankmeyer, ... Thos. W. Nugent. St. Elmo Hotel. Union Twp. School Board. School Board. Knights of Malta.

FACTORY.

Ardmore, ...	Body shop, ...	Stearns & Castor, ...	Autocar Co.
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LODGING HOUSE.

Reading, ...	Apts and store, ..	H. G. Mohn, ...	Walter Mast.
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SUMMARY.

Fire escapes, ...	11
Factories, ...	1
Lodging houses, ...	1
Total, ...	13

PLANS APPROVED WEEK ENDING FEBRUARY 26, 1916.

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Osceola, ...	Hotel, ...	Osborn Machine Co., ...	Martin Dugan.
Norristown, ...	School, ...	Metz Struc. Steel Co., ...	Norristown School Board.
Easton, ...	Apartments, ...	C. D. Trumbauer, ...	Louis Sulkin.
Lancaster, ...	Hall, ...	Geo. W. Anne & Son, ...	Order of Moose.
York, ...	Factory, ...	Geo. W. Anne & Son, ...	Walton Cigar Co.
Annville, ...	School, ...	Smith Fence & Iron Co., ...	Lebanon Valley College.
Sunbury, ...	Hotel, ...	Geo. W. Anne & Son, ...	Central Hotel.
Kulpmont, ...	Apartments, ...	Geo. W. Anne & Son, ...	Paul Azary.
Kulpmont, ...	Apartments, ...	Geo. W. Anne & Son, ...	M. Linowski.
Kulpmont, ...	Factory, ...	Geo. W. Anne & Son, ...	Hanlon Bros.
Shamokin, ...	Apartments, ...	Geo. W. Anne & Son, ...	Isaac Dlugie.
Shamokin, ...	Factory, ...	Geo. W. Anne & Son, ...	Jiles Mfg. Co.
Indiana, ...	Bank, ...	P. Rieseck, ...	Deposit Bank.
Easton, ...	Apartments, ...	Brownsworth & Co., ...	S. J. Hochman.
Sunbury, ...	Hotel, ...	Potts Mfg. Co., ...	Dr. Myer Walter.
Harrisburg, ...	Warehouse, .....	.....	Capital City Junk Co.
Johnstown, ...	Office, .....	.....	Citizens Light, Heat & Power Co.
Irwin, ...	Office, ...	R. C. Hollister, ...	Bell Telephone Co.

THEATRE.

Tidioute, ...	M. P. T., ...		F. Z. Jones.
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APARTMENT HOUSE.

Reading, ...	Apts. and store, ...	H. G. Mohn, ...	Samuel M. Baer.
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SUMMARY.

Fire escapes, ...	18
Theatres, ...	1
Apartments, ...	1
Total, ...	20

PLANS APPROVED WEEK ENDING MARCH 4, 1916.

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Allentown. ....	.....	McDermott Engineering Co.,	Jos. A. Urus Prong.
Carnegie.	School.	Taylor & Dean.	
Johnstown.	Dept. store.	Geo. J. Griffith Iron Works.	Schwartz Bros.
Coraopolis. ....	.....	Taylor & Dean.	John McMichaels.
Harrisburg.	Printery.	Potts Mfg. Co., ...	Hbg. Burlal Case Co
Braddock. ....	.....	Taylor & Dean.	L. F. Holtzman.
Wilkinshurg. ....	.....	Geo. J. Griffith Iron Works.	John Stenger.
Old Forge.	Tenement.	Scranton Iron & Steel Co.,...	Mrs. Esther Brown.
Altoona. ....	.....	Geo. J. Griffith Iron Works.	W. B. Simpson.
Portage.	Mill building, ...	Fred. A. Phelps.	Ernest & Herman Levy.

THEATRES.

Connellsville.	M. P. T., ...	South Penna. Engineering Co.	P. L. Mkalarias.
Connellsville.	M. P. T., ...	Henry W. Altman.	Wagner & Wishart.

HOTELS AND APARTMENTS.

Eddystone.	Hotel.	Henon & Boyle.	Hotel Remington.
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FACTORIES.

S. Bethlehem. ...	Pattern shop. ...	Westinghouse, Church, Kerr & Co.	Bethlehem Fdy. & Mach Co.
Spring City.	Underwear mill...	N. Poley.	New Century Knitting Co.
Lancaster.	Printery.	John H. Wickersham.	Lancaster Examlner Bldg.

BAKERIES.

Philadelphia.	Bakery. store and dwelling.	Durham Bros., ...	Schlosberg & Cohen.
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SCHOOLS.

East Stroudsburg..	Assembly room...	N. J. School & Church Fur. Co.	E. Stroudsburg School Board.
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SUMMARY.

Fire escapes, ...	10
Theatres, ...	2
Hotels, etc., ...	1
Factories, ...	3
Schools, ...	1
Bakeries, ...	1
Total, ...	18

PLANS APPROVED WEEK ENDING MARCH 11, 1916.

FIRE ESCAPES.

Town.	Building.	Architect or Contractor.	Owner.
Braddock, ...	Hotel, ...	Star Ornamental I. & W. Works.	L. Walter.
Johnstown, ...	Office building, ..	Cambria Steel Co., ...	Cambria Steel Co.
Shenandoah, ...	Hotel, ...	Wm. F. Remppis Co., ...	Mr. Schmidt.
New Brighton, ...	Club building, ...	Ellwood City Iron & Wire Works.	A. Hanauer.
Charleroi, ...	Office building, ...	Ellwood City Iron & Wire Works.	Charleroi Savings & Trust Co.

THEATRES.

Pittston, ...	M. P. T., ...	Percival J. Morris, ...	James Corcoran.
Union City, ...	M. P. T., ...	Chapman & Graham, ...	G. J. Carlson.
Allentown, ...	M. P. T., ...	Chas. W. Grossart, ...	Geo. Stuber.

FACTORY.

Chester, ...	Printery, ...	C. F. Baker, ...	John Spencer.
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SUMMARY.

Fire escapes, ...	5
Theatres, ...	3
Factories, ...	1
Total, ...	9

INDUSTRIAL BOARD RULES ON "REST DAYS" FOR WOMEN EMPLOYED IN HOTELS AND INSTITUTIONS.

FURTHER RULES ON EXPLOSIVES AND BOILERS.

The Industrial Board of the Department of Labor and Industry recently adopted rulings upon the question of the sub-division of the working day, for women employes in hotels and institutions. This subject has been under investigation for nearly a year. An investigation of one-fourth of the Philadelphia hotels and institutions was made by special investigators and inspectors of the Department of Labor and Industry with the co-operation of the Consumers' League. In addition to the investigation in the Philadelphia hotels, investigations were conducted in Pittsburgh, Erie, Warren, Oil City, Cambridge Springs and Sharon. For the last three months, ending March 1, experimental work was carried on in Philadelphia, Pittsburgh, Erie and Sharon. In the hotels and institutions of these cities the various recommendations of the Committee of the Board were carried out. The investigation was conducted under the direction of a committee of the Industrial Board, including Mrs. Samuel Semple and Otto T. Mallery, of Philadelphia.

After hearing the report of the sub-committee the Board adopted the recommendations submitted, which are as follows:

1. Short term summer hotels are permitted to sub-divide the day of rest, giving two half days in each calendar week.

2. Hotels and institutions employing not more than ten women are permitted to treat the rest day in any of the following ways: Give 24 hours consecutive rest, beginning at any hour of the day, to continue until a corresponding hour the following day; give one complete day of 24 hours in each calendar week; give complete day off on Sunday one week, and complete day off on week day, the next week (variation under plan of day in each calendar week;) give alternate Sundays off, with one-half week day each week, totalling two full days in each fortnight; where it works no injuries to employe, give two half holidays per week, defining half day as five hours of consecutive service.

3. Hotels and institutions employing more than ten women are permitted to operate as follows:

Give one complete day of rest in each calendar week; give 24 hours consecutive rest, beginning at any hour of the day, to continue until a corresponding hour the following day. (This involves recognition

of the fact that much of such labor is three period work and not easily divided by any formal definition of what constitutes a half day's service.)

4. Posting of definite schedule in all cases is required, showing time for individual, and (in larger hotels and institutions) for the particular position.

Rulings Supplement Laws.

The Woman's Law adopted in 1913 and amended in 1915 provides that women may work not more than ten hours a day, 54 hours a week, or six days in any one week. The amendment of 1915 granted the Industrial Board the power to sub-divide the day of rest into two periods if it was considered advisable to do so. The amendment was passed at the last session of the Legislature at the instance of the managers of hotels and institutions who thought that the sub-division of the day of rest would facilitate their observance of the law. The request for a sub-division of the day of rest in the larger hotels was disallowed because where efficient management was found to exist the law was found to be workable and therefore modification is not necessary.

Two of the reasons advanced by the hotels requesting the sub-division of the day of rest was that in giving a whole day of rest, extra expense was involved and that there was inconvenience to the guests as well as difficulty in securing employees. It was found that in the larger and better managed hotels and institutions these facts did not apply.

In the larger institutions receiving State aid an additional reason for disallowing their request was the feeling of the Industrial Board that State institutions should lead in observing State laws and that such institutions, being supported by the State for the welfare of its wards, should lead in considering the welfare of all connected with such establishments. Along the same lines, in larger institutions supported by private beneficence, the request for a sub-division of the day of rest was disallowed because such institutions are usually based on high ideals of religion and service and it was therefore felt they should especially set the example of continuing those ideals by their co-operation.

An additional reason for the disallowance was that such institutions, being entrusted with funds for beneficent and religious work for the public should so operate those funds as to benefit all connected with their operation, and because of the high idealism in the founding of such institutions they should be the foremost in establishing ideal labor relations.

The flexibility allowed in the larger hotels and institutions was because one day in each calendar week has been found helpful in adjusting the problem of the weekly rest day in at least one other business employing large numbers of women. The Board also recognized the fact that the three period divisions of much of hotel service is a step in advance in the handling of this matter, and helps to eliminate the difficulty of defining a "half day's service."

In handing down its decision the Industrial Board made the following statement:

"The Board does not hesitate to disallow petition in this case because the inquiry has revealed the fact that the Inspection Bureau of the Department has already been exceedingly generous to employers in those cases in the manner computing the time of service of those employed. Much of the work in question in both hotels and institutions comes under the head of three period work; and while it frequently begins as early as six or six-thirty A. M. and lasts (with interruptions) until eight P. M. the custom has been to compute as working time only the hours in actual active service. The Board considers that this is a concession of sufficient ground to cover any charge of injustice to the employers."

John Price Jackson, Commissioner of Labor and Industry, and Chairman of the Industrial Board, in commenting upon the ruling of that body, said that he felt all private employers of domestic help should follow the ruling set by the Board and see that their employes have at least one full day of rest each week, or, if that is not found feasible, that they allow two full half-days.

Amend Ruling on Explosives.

The Industrial Board has amplified the rule making it a misdemeanor for persons to carry matches into a powder mill by passing a further rule that it is a misdemeanor for matches to be carried into any plant where explosives are handled or stored. The rule is as follows:

Carrying of Matches Where Explosives Are Handled or Stored.

"No person where explosives are handled or stored shall have or carry upon his person matches, cigar lighters or contrivances or devices for lighting. Every mill shall be provided, at its entrance, with two (2) covered fire-proof receptacles, one (1) for matches and the other for lighted cigars, cigarettes or pipe contents. Each of such receptacles shall be plainly labeled to show the purpose for which it is provided. No person shall enter such mill without first depositing in the receptacle provided any and all such matter. Notice to the effect that the carrying of matches is prohibited shall be conspicuously posted."

Boiler Code Effective After July 1, 1916.

In reply to various applications from boiler manufacturers as to boilers in stock and existing contracts the Industrial Board has ruled that the Boiler Code applies only to contracts placed for boilers on or after July 1, 1916.

The Board has adopted as a boiler code for Pennsylvania, the code recommended by the American Society of Mechanical Engineers.

This code will become effective in Pennsylvania except in cities already having boiler codes.

A Division of Boiler Inspection has been organized in the Inspection Bureau of this Department, for the purpose of administering this code. It is the intention that every inspector authorized to inspect boilers in the State of Pennsylvania, shall pass an examination based on this code, and shall have a certificate of approval issued to him, based on such examination, before July 1, 1916.

The Division of Boiler Inspection will be prepared to give these examinations to all inspectors, in the offices of the Department in Harrisburg, on the following dates:

May 1st to 6th inclusive.

May 10th-17th-24th and 31st.

This notification is given inspectors that they may arrange to take this examination and be properly qualified to inspect boilers now in operation or hereafter to be operated in Pennsylvania. No charge will be made for these examinations, nor for the issuing of the certificates.

INDUSTRIAL BOARD CONSIDERING REVISION OF EXISTING SAFETY STANDARDS AND FORMULATION OF ADDITIONAL STANDARDS.

The Industrial Board has revised the Safety Standards for Bakeshops. Public hearings on the contemplated revisions have been held, The Board is also formulating additional safety standards applicable to the steel and textile industries.

Bakeshops.

Revision of the Bakeshop Standards, formulated in December, 1914, has become necessary from conditions which have been reported by the Inspection force. It is always difficult to foresee and predicate

rules and regulations for the guarding of any industry without practical experience, and from time to time it will be necessary to make amendments to prevent any hardships or to cover omissions.

The changes made in this revision are mainly in defining more clearly the meaning of terms used, so that no one will err in interpretation.

The large hotels and apartment houses, owing to modern conditions, must necessarily conduct their bakeshops and other working conditions underground.

These bakeshops are perfectly constructed, lighted by electricity, lined with encaustic tile and ventilated by force draught taken from the roof. Under the standards now in force they come under the Cellar Bakeshop classification and new ones are prohibited after February 15, 1915. Two new classes are created:

Class A. Cellar Bakeshops.

Class B. Basement Bakeshops.

Class A. Cellar Bakeshops.

"A shop at least nine feet high, floored underneath, lined with tile or concrete, or other sanitary equivalent; when electricity is the only artificial light used, ventilated by an approved system introducing clean air and removing impure air so that the contents of the room are completely changed every ten minutes. The intake of clean air being located at least ten feet above the ground; when the windows are screened in an approved manner to exclude dust and which conform in all respects with the Safety Standards."

Class B. Basement Bakeshops.

"A shop at least nine feet high, floored underneath and lined with tile or concrete, or their sanitary equivalent; where electricity is the only artificial light used; where the natural ventilation is reinforced by an approved ventilating system or by approved power driven fans; where the windows are screened to exclude dust and which conforms in all other respects with these Safety Standards."

After January 1, 1917, all Cellar and Basement Bakeshops shall be illuminated wholly by electricity or by some illuminant which does not consume oxygen and shall be ventilated by an approved system which introduces clean air and removes impure air by approved ventilating fans.

After January 1, 1920, all cellar and basement bakeshops not conforming to Class A shall be discontinued.

Bakeshops are so essential to the necessities of modern life that it is necessary to create conditions surrounding their products not only for cleanliness, but also—which is just as important—the health and comfort of the employe.

Rule Affecting Employment Bureau.

The following rule was adopted by the Board:

“That no money or valuable consideration whatsoever shall be accepted or demanded by the Employment Agent until after the applicant has first been referred to a bona fide position; that then, if through no fault of the applicant, he fails to obtain employment from the firm or employer referred to, the fee, transportation or other expense shall be refunded to applicant on demand; that in case of differences with reference to the rate of fees or other matter, the agent or prospective employee shall present the case to the Suitable representative of the Bureau of Employment.”

Committee on Approvals.

This committee was organized February 8th. Its membership consists of: James C. Cronin, R. M. Pennock, J. S. Spicer, L. R. Palmer, O. E. Thomson, Dr. F. D. Patterson, J. H. Walker, Wm. Lauder, Secretary.

The following rule was adopted:

“That in all applications for the approval of the Industrial Board, said application shall be accompanied by the article itself or a practical working model for which said application for approval is made. In all cases where the said article has been approved by the Underwriters' Laboratories, the copy of such approval shall accompany said application.

BUREAU OF EMPLOYMENT RAPIDLY EXPANDING TO MEET THE NEEDS OF EMPLOYERS AND WORKERS.

Employers and workers, in daily increasing numbers, are eagerly soliciting the services of the Bureau of Employment of the Department of Labor and Industry. The Bureau's capacities for service are expanding daily to meet the increasing demands.

In addition to the Employment Bureau offices operating at Harrisburg, Philadelphia and Johnstown, a fourth office was opened in

the Hartje Building, Pittsburgh, March 1. An office has also been opened in Altoona, in the Mateer Building, where unemployed persons may file their applications for work and these applications will be forwarded to the central offices or clearing house of the Bureau at Harrisburg. Every worker, filing such application, will be notified if it is possible to find him employment. The office opened at Pittsburgh is under the supervision of Samuel H. Thompson, Superintendent. The Pittsburgh Sun published the following article March 1, discussing the opening of the Pittsburgh office:

Under the supervision of Director Jacob Lightner of the Bureau of Employment of the State Department of Labor and Industry, the Pittsburgh employment and intelligence office, the third to be established by the Commonwealth, was formally opened at 9 o'clock this morning. Before noon more than 150 applicants has appeared at the office, on the eighth floor of the Hartje Building. The success of the activity, which was authorized by the Legislature in 1915, is indicated by the fact that eight industrial plants in the Pittsburgh district are already in touch with the Bureau, with assurances they have places for 1,500 persons.

The vacancies, according to Samuel H. Thompson, who will have charge of the local office, and who has been organizing his force for the last month, range from common labor to clerical work. Next to the common labor, the greatest demand seems to be for mechanics, including machinists and machine tool operators, carpenters, salespeople and inspectors. There is also much demand for female domestic service, but 90 per cent. of the applications filed today were those of grown men. The ages of the applicants ranged from 19 to 60. A number had been placed in positions before noon.

Success Predicted.

"We have every reason to believe that the Pittsburgh office will be a big success, said Director Lightner today. "This office is central to one of the greatest manufacturing sections of the world with a growing demand of every form of diversified labor, skilled and common. We believe that the new activity will be of great service to employer as well as to the man or woman seeking work."

"My impression was that it would take us weeks to get the people interested and to show them we could really do things," said Superintendent Thompson, "and I was therefore astonished with the rush which came this morning. A large number of those who appeared had, of course, filed mail applications in advance. This demonstrates they

are in real earnest about wanting a job. The good faith of a number of them was further attested by notice from a number who had applied February 23 and 24.

Not to Harass Agencies.

"It will be our intention to keep in touch with all applicants before and after we get work for them. We have arranged a return post-card system by which we will be informed that they have been placed. Just here I would like to say it will not be our purpose to harass the legitimate private agency, but if an agency takes any money from man, woman or child, they must get the person a job or refund the deposit. We have a corps of inspectors and investigators and will spare no pains to run down any illegal agency."

The present force occupies rooms on the same floor with the workmen's compensation offices. It comprises in addition to the superintendent: W. J. Wilson, investigator; Z. Barach, interpreter; Miss Mary M. Graham and Edna H. Stewart, clerks. All service is without charge to the applicant or the employer. One of the restrictions is that no employees will be furnished to plants during the presence of labor troubles or strikes.

The Pittsburgh office will keep in touch with the offices in Harrisburg and Philadelphia and will co-operate with them in placing applicants. Although the new activities have been operating but a few months in Harrisburg more than 1,000 persons have been placed in employment and many offending agencies punished.

The Altoona Mirror of Thursday, March 9, published the following article regarding the opening of the office in Altoona:

Jacob Lightner, Director of the Employment Bureau under the State Department of Labor and Industry, arrived in Altoona this morning to open an agency, the fifth in the State, in the Mateer building. The work of the bureau in this city will be taken care of by the office force of Jacob Snyder, referee for the Sixth Pennsylvania Compensation District.

The employment bureaus, such as the one just opened here, are already serving both the employer and employe seeking labor in an efficient manner since the bill was passed June 4, 1915. The purpose of the agencies in various parts of the commonwealth is to assist in the equalization of labor, to supply the demands of those needing workers and to find positions for those looking for work.

The work of the Bureau is carried on strictly free of charge both to employer and employe. The applications of both parties after

being made out at the local office are forwarded to Harrisburg headquarters where officials of the Bureau conduct business on the clearing house method supplying the demands for labor in any part of the State where it is needed. The Department at Harrisburg receives weekly reports from its agencies and it is continually kept in touch on the labor situation throughout the State.

After the Bureau headquarters were established in Harrisburg the first outside agency established was placed at Johnstown, Nov. 8, 1915. The Philadelphia office was opened in November and the Pittsburgh agency the first of this month. With the mines and many other forms of industry in this section of the State it is believed that the agency here will be in a position to cope with the many demands efficiently and without the least delay.

When a man looking for work applies to the agency he is given a blank form to fill out. On this he writes his name, position he desires, if any in particular, his experience, where he wishes employment and many other points of information. This blank is then forwarded to the Harrisburg office where the right man is given an opportunity to fill the right position.

Blanks are also furnished for the employer who gives the name of his firm, kind of worker he needs, number, etc., and information which will enable the Department to secure immediately from the lists on hand the employes which the concern wants.

The agencies are proving a wonderful help in distributing labor throughout the State where it is needed and securing employment for hundreds who are out of work and want to earn a livelihood. The only instance in which the employment agencies cannot be of service to both employer and employee is during labor troubles such as strikes, etc.

The work of the three offices of the Employment Bureau in operation February is summarized as follows:

Total number of placements for the month of February was: Harrisburg office, 228; Philadelphia office, 311; Johnstown office, 31. The total number of positions filled by the three offices was 570. The number of juveniles placed by the school authorities throughout the State, of which reports have been received in February, is 235.

Reports received weekly from the private employment agents, doing business for profit, for the month of February show the following number of placements: Philadelphia, 4,764; Pittsburgh, 1,778; other places, 193.

The total number of placements by private employment agents, for the month of February was 6,735.

BUREAU OF STATISTICS PRESENTS FIGURES SHOWING
ALMOST \$2,000,000 LOST IN WAGES BY INDUSTRIAL
ACCIDENTS IN 1915.

The economic waste in lost wages due to industrial accidents in Pennsylvania during 1915 was \$1,997,025. Workers injured in 20,571 plants lost 820,743 working days as a result of their injuries. That statement is based on data compiled by the Bureau of Statistics and Information of the Department of Labor and Industry, which received reports during the year indicating that 61,540 workers had been injured, including 1,204 fatalities.

More workers were injured in Pennsylvania industries during January and February of this year than the total number of soldiers of both armies wounded in the battle of Gettysburg. Reports received by the Bureau of Statistics and Information indicate 37,940 workers injured during the first two months of this year including 351 fatalities. Reports of injuries to workers are daily increasing in numbers and aggregated approximately 1,000 a day during the latter part of February.

The first two months of this year a general average of 759 employees were injured on every working day and seven workers killed. There were 24,475 reports of injuries and 222 fatalities received at the Bureau during February and 13,465 injuries and 129 fatalities during January. These accidents, if continued, will result in the wounding of 300,000 workers in Pennsylvania's industrial army in 1916.

The new Workmen's Compensation Act has been, in a large measure, responsible for the reporting of all accidents to the Labor Department, but even with the tremendous number of reports now being received there is evidence in the Department that all accidents are not being reported. A number of agreements for Workmen's Compensation payments have come to the Compensation Bureau although no reports of the accidents had previously been filed.

Compilation of industrial accidents during 1915, has been completed by the Bureau of Statistics. Metal plants, mines and public service work exacted the highest toll of life and health of the 18 sub-divisions of industry included in the 1915 classification. The results are, metal plants, 25,094 injured, including 212 killed; mines and quarries, 13,955 injured including 749 killed; public service, 16,919 injured, including 51 killed.

The records show that 37,442 of the industrial accident victims were married and had 75,444 dependents. Unmarried victims of accidents numbered 22,813. There were 181 boys and 21 girls under sixteen injured.

Lack of safeguards was responsible for 1,023 of the injuries to workers. Causes of the total number of injuries are classified as follows: Burns and scalds, 4,502; crushes and bruises, 23,007; cuts and lacerations, 17,856; fractures, sprains and dislocations, 10,973; hernia, 105; blood poison, 263; punctures, 666; unclassified, 4,168.

Classification of injuries to women show that 16 were fatal, 59 serious and 280 considered as minor, or, not resulting in disability for a period longer than 30 days. Twelve women were killed during the year while working in plants producing paper and paper products. One woman was killed in each of the following employments: Laboratory service; clay, glass and stone products; clothing manufacture and miscellaneous products.

Although textile work caused 77 minor injuries to women and 14 serious injuries, none of these injuries caused death.

Accidents to male employes resulted in 1,188 fatalities, 7,215 serious injuries and 52,782 minor injuries which did not result in disability for a period longer than 30 days.

The complete record of 1915 accident results is appended.

TABLE 1—SUMMARY OF ACCIDENTS FOR 1915.

Industries.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Degree and Sex.		
									Males.		
									Fatal.	Serious.	Minor.
Total for 1915, ...	4,502	23,007	17,856	10,973	105	283	666	4,168	1,188	7,215	52,782
Horticultural and floricultural, ...	0	1	2	1	0	0	0	0	0	1	3
Engineering and laboratory service, ...	1	3	0	2	0	0	0	1	0	1	5
Building trades, ...	20	190	131	140	3	5	15	39	32	92	419
Chemicals and allied products, ...	202	329	209	224	4	10	7	92	38	118	904
Clay, glass and stone products, ...	59	313	427	158	1	1	3	56	34	119	858
Clothing manufacture, ...	5	23	42	21	0	1	0	10	1	13	65
Food and kindred products, ...	24	91	150	66	3	2	1	35	11	50	255
Leather and rubber goods, ...	21	86	92	42	1	1	2	16	3	23	219
Liquors and beverages, ...	4	21	19	11	0	1	1	9	4	14	48
Lumber and its re-manufacture, ...	7	95	181	73	0	1	1	27	13	79	290
Paper and paper products, ...	44	125	111	75	0	2	4	23	7	37	287
Printing trades, ...	1	20	24	12	0	0	1	3	2	8	42
Textiles, ...	33	147	154	86	1	6	5	32	5	47	321
Miscellaneous products, ...	331	195	183	153	2	5	9	58	26	119	691
Metal and metal products, ...	2,552	8,234	7,954	3,940	50	153	298	1,902	212	2,473	22,363
Mines and quarries, ...	643	5,543	4,087	2,621	16	48	200	799	749	2,338	10,866
Public service, ...	810	7,449	4,110	3,811	24	29	118	1,068	51	1,667	15,148
Tobacco and its products, ...	0	3	7	7	0	0	1	0	0	6	9

TABLE 2—SUMMARY OF ACCIDENTS FOR 1915.

Industries.	Degree and Sex.			Total number of accidents.	Time and Wage Loss.		Number of dependents.	Accidents due to lack of safeguards.	Social Condition.		Minors Under 16 Years.	
	Fatal.	Serious.	Minor.		Days.	Wages.			Married.	Single.	Males.	Females.
Total for 1915, ...	16	59	280	61,540	\$20,743	\$1,997,024 73	75,444	1,023	37,442	22,813	181	21
Horticultural and floracultural, ...	0	0	0	4	58	84 00	10	0	2	2	0	0
Engineering and laboratory service, ...	1	0	0	7	47	95 30	13	0	6	1	0	0
Building trades, ...	0	0	0	543	7,455	19,583 00	398	4	287	214	0	0
Chemicals and allied products, ...	0	2	6	1,063	12,505	26,885 87	1,232	11	628	408	2	0
Clay, glass and stone products, ...	1	0	6	1,018	13,820	27,022 60	1,271	14	632	355	7	1
Clothing manufacture, ...	1	4	18	92	1,014	1,820 15	51	6	34	54	4	3
Food and kindred products, ...	0	2	22	340	4,713	9,782 41	281	8	176	149	6	0
Leather and rubber goods, ...	0	1	4	260	4,199	8,247 85	246	9	145	107	3	0
Liquors and beverages, ...	0	0	0	66	1,212	3,316 00	97	1	41	23	0	0
Lumber and its re-manufacture, ...	0	1	2	385	6,365	13,326 52	403	10	246	120	3	5
Printing trades, ...	12	10	31	384	4,753	8,431 85	233	10	174	192	3	3
Paper and paper products, ...	0	0	10	61	1,003	2,009 95	39	4	22	36	2	0
Textiles, ...	0	14	77	464	5,748	10,552 40	301	24	203	226	25	9
Miscellaneous products, ...	1	6	19	862	10,995	21,473 65	353	19	503	329	6	0
Metal and metal products, ...	0	5	41	25,094	315,954	764,166 90	28,870	253	14,936	9,653	51	1
Mines and quarries, ...	0	0	2	13,955	225,642	548,048 55	21,035	57	8,365	5,337	61	0
Public service, ...	0	3	40	16,919	204,935	531,493 83	19,959	592	11,036	5,397	7	0
Tobacco and its products, ...	0	1	2	18	349	693 85	12	1	6	10	1	0

DIVISION OF MUNICIPAL STATISTICS COMPILES STREET
PAVING DATA FROM PENNSYLVANIA'S THIRD
CLASS CITIES.

The Division of Municipal Statistics and Information of the Bureau of Statistics and Information recently compiled a tabulation from twenty-eight of the thirty-one third class cities of the Commonwealth, showing the number of miles of paved streets in these cities, the principal kind of paving in use, the average price paid, whether or not the entire cost of paving is assessed against the abutting property and, if not, the proportion paid by the city; the method of making a reduction on corner or irregular shaped lots, as required by the Clark Act, the kind of curbing in use, the price of it and the manner of payment.

Four of these cities, Allentown, Harrisburg, Williamsport and York, pay the cost of paving the street intersections and in front of non-assessable property.

Bradford, Carbondale, Easton, Erie, Lebanon, Oil City, Wilkes-Barre and Franklin pay for the street intersections.

In Corry, DuBois, Hazleton, Monongahela City, Pittston and Titusville thirty-three and one-third per cent. of the total cost is paid by the city.

In Johnstown thirty-three and one-third per cent. of the cost and the intersections is assumed by the city.

In New Castle twenty per cent. of the total and the cost of intersections is paid by the city.

In Altoona and McConnellsville the entire cost, including intersections, is paid by the city.

The assessments in most every instance are levied by the foot front rule, there being but two cities, McKeesport and Franklin, where the cost is assessed according to benefits exclusively. A reference to the table will show the manner in which reductions are allowed on corner lots or lots of irregular shape.

In Lancaster and Reading the entire cost of paving is assumed by the city.

It would seem that under this rule these municipalities, according to population, have been able to do less street paving than where a goodly proportion of the cost is assessed against the abutting property, Lancaster having but seven miles and Reading twenty-five miles of paved streets.

In ten of the cities sheet asphalt is the principal kind of pavement in use, the remaining cities using largely brick on a concrete base.

Eight municipalities have some wooden block pavement in use, Lebanon having the largest amount 2.2 miles.

The average cost of sheet asphalt runs from \$1.70 to \$2.96 per square yard. Brick paving costs from 1.60 to \$2.50 per square yard on concrete base and as low as \$1.25 on gravel base. The most recent cost of wooden block is \$2.72 per square yard on concrete base. Blue-stone curbing runs from fifty-five cents to eighty-five cents per linear foot.

This Division is now engaged in making a similar tabulation of all boroughs of the State having a population of eight thousand and upward. It is the purpose to make these tabulations annually and in this way it will be able to show the prevailing cost of paving during the preceding year.

PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY DIVISION OF MUNICIPAL STATISTICS.

Paving Statistics, Cities of the Third Class.

	Miles of paved street.	Principal kind of pavement.	Is the entire cost of paving assessed against the abutting property.	What proportion is paid by the city?	What provision is made as required by the Clark Act for the reduction on corner lots, or lots of irregular shape.
Allentown, ...	30	Sheet, ...	No,	Inters. exempt, ...	7/12
Altoona, ...	44.5	Brick, ...	Yes,	20%, .....	.....
Beaver Falls, ...	10.5	Brick, ...	No,	Inters., .....	.....
Bradford, ...	14.5	Brick, ...	No,	Inters., ...	50 ft.
Carbondale, ...	4.5	Brick, ...	No,	Inters., .....	.....
Chester, ...	30	Plastic, ...	No,	Inters., .....	.....
Easton, ...	8.3	Brick, ...	No,	Inters., .....	.....
Franklin, ...	9.4	Brick, ...	No,	Inters., .....	.....
Connellsville, ...	11.7	Brick, ...	Yes,	.....	.....
Corry, ...	4.9	Brick, ...	No,	33 1/3%, ...	Reduced.
DuBois, ...	7	Brick, ...	No,	33 1/3%, ...	Reduced.
Erie, ...	68	Sheet, ...	No,	Inters., .....	.....
Harrisburg, ...	74.8	Sheet, ...	No,	Inters. exempt, ...	25%
Hazleton, ...	5	Brick, ...	No,	33 1/3%, .....	.....
Johnstown, ...	42.5	Brick, ...	No,	33 1/3%, inters., ...	Reduced.
Lancaster, ...	7	Brick, ...	No,	All, .....	.....
Lebanon, ...	2.2	Wood B., ...	No,	Inters., .....	.....
McKeesport, ...	35.2	Brick, ...	No,	Benefits, ...	60%
Meadville, ...	9.4	Brick, ...	No,	Inters., ...	Reduced.
Monongahela City, ...	6.9	Brick, ...	No,	33 1/3%, ...	Reduced.
New Castle, ...	30	Brick, ...	No,	20% inters., ...	Reduced.
Oil City, ...	23	Brick, ...	No,	Inters., ...	Reduced.
Pittston, ...	7	Brick, ...	No,	33 1/3%, ...	Reduced.
Reading, ...	25	Brick, sheet, ...	No,	All, .....	.....
Titusville, ...	10.1	Brick, sheet, ...	No,	33 1/3%, .....	.....
Wilkes-Barre, ...	46	Brick, sheet, ...	No,	Inters., ...	50 ft.
Williamsport, ...	15	Brick, ...	No,	Inters. exempt, ...	25% to 33 1/3%
York, ...	15.6	Sheet, ...	No,	Inters. exempt, ...	22%

BUREAU OF WORKMEN'S COMPENSATION.

Workmen's Compensation Board Adopts Rules for Ascertaining
Weekly Wages as Basis for Computing Compensation.

The Workmen's Compensation Board has adopted the following rules for ascertaining weekly wages as a basis for computing compensation, under the Workmen's Compensation Act of 1915:

Wages is the the amount in money value agreed upon in the contract of employment, written or oral, in force at the time of the accident, to be paid to the employee for his services.

In determining the money value of wages,

1. Do not add to the amount agreed upon in the contract—

- (a) Gratuities to the employe, such as tips or presents.
- (b) Wages paid for overtime, except in seasonal employments, or employments dependent on the weather.
- (c) Board, lodging, rent, fuel or similar advantages from the employer, unless the money value of such advantages shall have been fixed as part of the wages by the parties at the time of the hiring.

2. Do not deduct from the amount agreed upon in the contract—

- (a) The value of material, supplies, tools and other things necessary for the performance of the employee's contract with his employer, furnished or paid for by the employer, unless the contract shall specifically provide that the employer shall furnish them and that the employe must procure them from the employer and from no one else, and that the employer shall deduct the value thereof from the employe's gross earnings.

If the contract of employment be in writing, such provision must be specifically included therein. If the contract is oral the burden is upon the employer to show that the employe received express notice that the contract contained this provision.

Unless the value of materials, etc., is fixed in the contract of employment, the amount to be deducted under a contract providing for such deduction shall be the fair market value of such materials, etc.

- (b) Sums due the employer for rent or supplies other than those necessary for the employe's use in the performance of his labor, even though supplied by the employer under a contract which gives him the right to deduct such sums from the wages from time to time due the employe.

When the wages are fixed at the time of the accident by the week, the weekly wage so fixed shall be the basis for computing compensation.

When the wages are fixed on a monthly basis, ascertain the weekly wages by multiplying the monthly salary or wages by 12 and dividing by 52.

When the wages are fixed by the year, divide the yearly wage by 52.

To find "Average Daily Wage" in continuous employment:

1. Take total earnings for six months preceding the accident, or so much thereof as employe has worked for the same employer.
2. Subtract from said "Total Earnings" all earnings for overtime, if any.
3. Divide remainder thus obtained by number of "Working Days."
4. For "Average Weekly Wage" multiply above result by five and one-half.

Note: "Working Days" shall be construed to mean total number of days in the period of employment covered, according to the calendar, less:

- (a) Sundays.
 - (b) Legal Holidays.
 - (c) Half holiday for each week.
 - (d) Days employe was prevented from working through no fault of his own.
5. When the employment is continuous and substantially constant and regular, the employe's earnings for the last full week preceding the accident may be taken as the average weekly earnings.

Period of Compensation Payments.

When compensation is paid semi-monthly, the compensation payments shall be ascertained by dividing the weekly compensation by seven and multiplying by the number of calendar days in the period.

When wages are customarily paid semi-monthly, compensation may be paid every two weeks.

Compensation for Fraction of a Week.

When at the termination of the disability compensation is payable for a fraction of a week, the employe shall receive for each day of such fraction of a week, including Sundays and holidays, one-sixth of his weekly compensation.

OPERATION OF THE WORKMEN'S COMPENSATION ACT.

The Workmen's Compensation Act, during the first few months of its operation, has demonstrated that it affords an almost instant financial relief to the industrial worker injured in the employment or to his dependents if he is killed.

When an employe is injured his employer makes a report to the Bureau of Statistics and Information of the Department of Labor and Industry. A report is also made to the insurance carrier. The medical expenses of the injured employe are paid during the first two weeks of his disability. After that time he receives the compensation as provided in the act.

When a fatal accident occurs, the employer must, within forty-eight hours, make a report to the Bureau of Statistics and Information of this Department. As soon as possible after the death of an employe, the employer is expected to enter into an article of agreement for compensation under the act for the widow and children and the agreement must be referred to the Compensation Board for approval or disapproval. After the provisions of the act are complied with, in an agreement, the Board approves the agreement, if it is properly drawn, and payments for compensation are paid to the dependents of the deceased.

In case the employer and dependents fail to enter into an agreement, a claim petition is filed by the dependents of the employe. This claim petition is referred to the referee in the district in which the interested parties reside. After due notice from the referee to both interested parties, a hearing is held and the referee decides

whether compensation should be paid. In the event of either party being dissatisfied with the award of the referee they can take an appeal from the referee to the Compensation Board which will hear the case and may sustain the referee or may make a new award. In case the parties interested are not satisfied with the Board's decision they can then appeal the case to the County Courts.

The following cases illustrate the operation of the Workmen's Compensation Act.

DEATH COMPENSATION AGREEMENT

Between

Mary Ricofaske, widow of Chas. Ricofaske, deceased, of Plymouth, Luzerne Co.,

and

The Kingston Coal Company, of Luzerne County, Penna.

Average weekly earnings at time of death, ...	\$18 00
Weekly compensation for 300 weeks, ...	10 80
The following persons are dependents of deceased employee:	

	Born.	Will Be 16:
Mary Ricofaske, widow, ...	Dec. 8, 1878, .....	.....
Francis Ricofaske, daughter, ...	Feb. 22, 1900, ...	Feb. 22, 1916.
Barnish Ricofaske, daughter, ...	Sept. 19, 1901, ...	Sept. 19, 1917.
Statia Ricofaske, daughter, ...	Jan. 30, 1904, ...	Jan. 30, 1920.
Leona Ricofaske, daughter, ...	Aug. 30, 1906, ...	Aug. 30, 1922.
Emma Ricofaske, daughter, ...	Nov. 23, 1909, ...	Nov. 23, 1925.
Edward Ricofaske, son, ...	June 11, 1912, ...	June 11, 1928.
Doro Ricofaske, daughter, ...	May 31, 1914, ...	May 31, 1930.
Irene Ricofaske, daughter, ...	May 31, 1914, ...	May 31, 1930.

The following amounts to be paid weekly to the dependents:

From Jan. 5, 1915, to Oct. 11, 1921, 300 weeks, 60% of wages (\$18.00), \$10.80, ...	\$3,240 00
From Oct. 11, 1921, to Aug. 30, 1922, 46 weeks, 50% of wages (\$18.00), \$9.00, ...	450 00
From Aug. 30, 1922, to Nov. 23, 1925, 168 weeks, 45% of wages (\$18.00), \$8.10, ...	360 00
From Nov. 23, 1925, to June 18, 1928, 133 weeks, 35% of wages (\$18.00), \$6.30, ...	837 90
From June 18, 1928, to May 31, 1930, 102 weeks, 25% of wages (\$18.00), \$4.50, ...	459 00
Total, ...	\$6,347 70

DEATH COMPENSATION AGREEMENT

Between

Mary Barosky, widow of Edward Barosky, deceased, of Jessup, Pa.,

and

Temple Coal Company, of Scranton, Pa.

Average weekly earnings at time of death, ...	\$13 88
Weekly compensation for 300 weeks, ...	8 33
The following persons are dependents of deceased employee:	

	Born.	Will Be 16:
Mary Barosky, widow, .....	.....	.....
Mary Barosky, daughter, ...	June 9, 1907, ...	June 9, 1919.
Victoria Barosky, daughter, ...	Sept. 10, 1908, ...	Sept. 10, 1924.
Katie Barosky, daughter, ...	Jan. 4, 1911, ...	Jan. 4, 1927.
Nellie Barosky, daughter, ...	July 3, 1912, ...	July 3, 1928.
Frank Barosky, son, ...	Jan. 3, 1914, ...	Jan. 3, 1930.

The following amounts to be paid weekly to the dependents:

From Jan. 15, 1916, to Oct. 21, 1921, widow, 4 children, 300 weeks, 60% of wages, (\$13.88), \$8.33, ...	\$2,499 00
--	------------

From Oct. 21, 1921, to Sept. 10, 1924, 4 children, 150 weeks, 45% of wages (\$13.88), \$6.24...	936 00
From Sept. 10, 1924, to Jan. 4, 1927, 3 children, 120 weeks, 35% of wages (\$13.88), \$4.86,....	583 20
From Jan. 4, 1927, to July 3, 1928, 2 children, 78 weeks, 25% of wages (\$13.88), \$3.47, ...	270 66
From July 3, 1928, to Jan. 3, 1930, 1 child, 78 weeks, 15% of wages (\$13.88), \$2.08, ...	162 24
Total, ...	\$4,451 10

DEATH COMPENSATION AGREEMENT

Between

Aida Charlotte Olinger, Widow of Joseph Lee Olinger,

and

American Sheet and Tin Plate Company, Pittsburgh, Pa.

The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Aida Charlotte Olinger, widow, .....	.....	.....
Joseph Andrew Olinger, son, ...	Oct. 16, 1909,	Oct. 16, 1925.

The following amounts to be paid weekly to the dependents:

From Jan. 31, 1916, to Nov. 7, 1921, 300 weeks, 45% of wages (\$20.00), \$9.00, ...	\$2,700 00
From Nov. 7, 1921, to Oct. 16, 1925, 205 weeks, 15% of wages (\$20.00), \$3.00, ...	615 00
Total, ...	\$3,315 00

DEATH COMPENSATION AGREEMENT

Between

Mike Michalcin, died Jan. 8th, 1916,

and

Pennsylvania Coal and Coke Corporation.

Average weekly earnings at time of death, ...	\$11.97 6/10
Weekly compensation for 300 weeks, ...	7.19

The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Maria C. Michalcin, widow, ...	April 13, 1880, .....	.....
Anna Michalcin, daughter, ...	Jan. 10, 1901, ...	Jan. 10, 1917.
Michael Michalcin, son, ...	April 29, 1902, ...	April 29, 1918.
John Michalcin, son, ...	Mar. 26, 1904, ...	Mar. 26, 1920.
Mary Michalcin, daughter, ...	May 6, 1906, ...	May 6, 1922.
Susan Michalcin, daughter, ...	July 19, 1908, ...	July 19, 1924.
Peter Michalcin, son, ...	June 28, 1910, ...	June 28, 1926.
Andrew Michalcin, son, ...	Dec. 9, 1912, ...	Dec. 9, 1928.
Helen Michalcin, daughter, ...	April 16, 1915, ...	April 16, 1931.

The following amounts to be paid weekly to the dependents:

From Jan. 8, 1916 to Oct. 15, 1921, 300 weeks, 60% of wages (\$11.98), \$7.19, ...	\$2,157 00
From Oct. 15, 1921, to May 6, 1922, 29 weeks, 50% of wages (\$11.98), \$5.99, ...	173 71
From May 6, 1922, to July 19, 1924, 115 weeks, 45% of wages (\$11.98), \$5.39, ...	619 85
From July 19, 1914, to June 28, 1926, 101 weeks, 35% of wages (\$11.98), \$4.19, ...	423 19
From June 28, 1926, to Dec. 9, 1928, 127 weeks, 25% of wages (\$11.98), \$3.00, ...	351 00
From Dec. 9, 1928, to April 16, 1931, 123 weeks, 15% of wages (\$11.98), \$1.80, ...	219 60
Total, ...	\$3,944 35

DEATH COMPENSATION AGREEMENT

Between

Elizabeth Kelly, Widow of J. J. Kelly,

and

George B. Newton Coal Co., Philadelphia, Pa.

Average weekly earnings at time of death, ... \$13.00
 The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Elizabeth Kelly, widow, .....	.....	.....
Elizabeth Kelly, daughter, ...	Sept. 2, 1901,	Sept. 2, 1917.
Mabel Kelly, daughter, ...	Jan. 11, 1905,	Jan. 11, 1921.
Arthur Kelly, son, ...	Aug. 6, 1908,	Aug. 6, 1924.

The following amounts to be paid weekly to the dependents:

From Jan. 12, 1916, to Sept. 2, 1917, 85 weeks, at 55% of wages (\$13.00),	\$7.15,	\$607 75
From Sept. 2, 1917, to Jan. 11, 1921, 175 weeks at 50% of wages (\$13.00),	\$6.50,	1,137 50
From Jan. 11, 1921, to Oct. 18, 1921, 40 weeks at 45% of wages (\$13.00),	\$5.85,	234 00
From Oct. 18, 1921, to Aug. 24, 1924, 148 weeks at 15% of wages (\$13.00),	\$1.95,	288 00
Total, ...		\$2,267 85

DEATH COMPENSATION AGREEMENT

Between

Helen Robusky or Hrobuchak, Widow of George Robusky or Hrobuchak,

and

Pennsylvania Coal Company, Dunmore, Pa.

The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Helen Robusky or Hrobuchak, widow, .....	.....	.....
Anna Robusky or Hrobuchak, daughter, ...	June 14, 1904,	June 14, 1920.
Theresa Robusky or Hrobuchak, daughter, ...	July 15, 1905,	July 15, 1921.
Juliana Robusky or Hrobuchak, daughter, ...	Jan. 29, 1907,	Jan. 29, 1923.
George Robusky or Hrobuchak, son, ...	Sept. 2, 1910,	Sept. 2, 1926.
Barbara Robusky or Hrobuchak, daughter, ...	Oct. 13, 1912,	Oct. 13, 1928.
Margareth Robusky or Hrobuchak, daughter, ...	Dec. 18, 1914,	Dec. 18, 1930.

The following amounts to be paid weekly to the dependents:

From Jan. 22, 1916, to Oct. 29, 1921, 300 weeks, 60% of wages (\$12.10),	\$7.26,	\$2,178 00
From Oct. 29, 1921, to Jan. 29, 1923, 65 weeks, 45% of wages (\$12.10),	\$5.45,	354 25
From Jan. 29, 1923, to Sept. 2, 1926, 187 weeks, 35% of wages (\$12.10),	\$4.24,	792 88
From Sept. 2, 1926, to Oct. 13, 1928, 110 weeks, 25% of wages (\$12.10),	\$3.03,	333 30
From Oct. 13, 1928, to Dec. 13, 1930, 113 weeks, 15% of wages (\$12.10),	\$1.82,	205 66
Total, ...		\$3,864 09

DEATH COMPENSATION AGREEMENT

Between

Mary Elliott, Widow of Charles Elliott,

and

United Coal Company, Pittsburgh, Pa.

The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Mary Elliott, widow, ...		
Howard R. Elliott, son, ...	May 3, 1902.	May 3, 1918.
Morris R. Elliott, son, ...	Oct. 1, 1906.	Oct. 1, 1922.
Mildred K. Elliott, daughter, ...	Mar. 29, 1911.	Mar. 29, 1927.

The following amounts to be paid weekly to the dependents:

From Jan. 19, 1916, to May 3, 1918, 119 weeks, 55% of wages (\$20.00), \$11.60, ...	\$1,309 00
From May 3, 1918, to Oct. 25, 1921, 181 weeks, 50% of wages (\$20.00), \$10.00, ...	1,810 00
From Oct. 25, 1911, to Oct. 1, 1922, 48 weeks, 25% of wages (\$20.00), \$5.00, ...	240 00
From Oct. 1, 1922, to March 29, 1927, 234 weeks, 15% of wages (\$20.00), \$3.00, ...	702 00
Total, ...	\$4,061 00

DEATH COMPENSATION AGREEMENT

Between

Annie Mehallick, widow of John Mehallick, deceased, of Hoisting Shaft, Pa.

and

The H. C. Frick Coke Co., of Scottdale, Pa.

Average weekly earnings at time of death, ... \$15.68

The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Annie Mehallick, widow, ...		
Mary Mehallick, daughter, ...	Aug. 10, 1901.	Aug. 10, 1917.
Elizabeth Mehallick, daughter, ...	July 22, 1902.	July 22, 1918.
John Mehallick, son, ...	Nov. 25, 1904.	Nov. 25, 1920.
Annie Mehallick, daughter, ...	Feb. 19, 1907.	Feb. 19, 1923.
Margaret Mehallick, daughter, ...	July 16, 1908.	July 16, 1924.
Sophia Mehallick, daughter, ...	Dec. 9, 1909.	Dec. 9, 1925.
Michael Mehallick, son, ...	March 4, 1911.	March 4, 1927.
George Mehallick, son, ...	April 19, 1913.	April 19, 1929.

The following amounts to be paid weekly to the dependents:

From Jan. 22, 1916, to Oct. 29, 1921, 300 weeks, 60% of wages (\$15.68), \$9.41, ...	\$2,823 00
From Oct. 29, to Feb. 19, 1923, 68 weeks, 50% of wages (\$15.68), \$7.84, ...	533 12
From Feb. 19, 1923, to July 16, 1924, 73 weeks, 45% of wages (\$15.68), \$7.06, ...	515 38
From July 16, 1924, to Dec. 9, 1925, 73 weeks, 35% of wages (\$15.68), \$5.49, ...	400 77
From Dec. 9, 1925, to March 4, 1927, 64 weeks, 25% of wages (\$15.68), \$3.92, ...	250 88
From March 4, 1927, to April 19, 1929, 111 weeks, 15% of wages (\$15.68), \$2.35, ...	260 85
	\$4,784 00
Funeral expenses, ...	90 00
Total, ...	\$4,874 00

DEATH COMPENSATION AGREEMENT

Between

Mrs. Minnie McQuait, widow of John McQuait, deceased, of Robertsdale, Huntingdon County, Pa.
and

The Rockhill Iron and Coal Co. of Robertsdale, Huntingdon County, Pa.

Average weekly earnings at time of death, ... \$11 60
Weekly compensation for 300 weeks, ... 4 64

The following persons are dependents of deceased employee:

Mrs. Minnie McQuait, Widow.

The following amounts to be paid weekly to the dependents:

From Jan. 29, 1916, to Nov. 5, 1921, 300 weeks, 40% of wages (\$11.61), \$4.64, ... \$1,392 00
Funeral expenses, ... 100 00
Total, ... \$1,492 00

DEATH COMPENSATION AGREEMENT

Between

Mary Harbargar Martin, widow of Samuel Martin, of Mt. Braddock, Pa.,

and

W. J. Rainey, of Uniontown, Pa.

Average weekly earnings at time of death, ... \$10 01
The following persons are dependents of deceased employee:

	Born.	Will Be 16:
Mary Harbargar Martin, widow, ...	April 25, 1902,	April 25, 1918.
Ethel May Martin, daughter, ...	May 14, 1906,	May 14, 1922.
Lenna Martin, daughter, ...	Aug. 10, 1909,	Aug. 10, 1925.
Andrew J. Martin, son, ...		

The following amounts to be paid to the dependents:
From Feb. 22, 1916, to April 25, 1918, 113 weeks, 55% of wages (\$10.01), \$5.51, ... \$622 63
From April 25, 1918, to Nov. 28, 1921, 187 weeks, 50% of wages (\$10.01), \$5.01, ... 936 87
From Nov. 28, 1921, to May 14, 1922, 24 weeks, 25% of wages (\$10.01), \$2.50, ... 60 00
From May 14, 1922, to Aug. 10, 1925, 168 weeks, 15% of wages (\$10.01), \$1.50, ... 252 00
Total, ... \$1,871 50

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



A BULLETIN OF INFORMATION FOR THE PUBLIC

MAY, 1916

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1916

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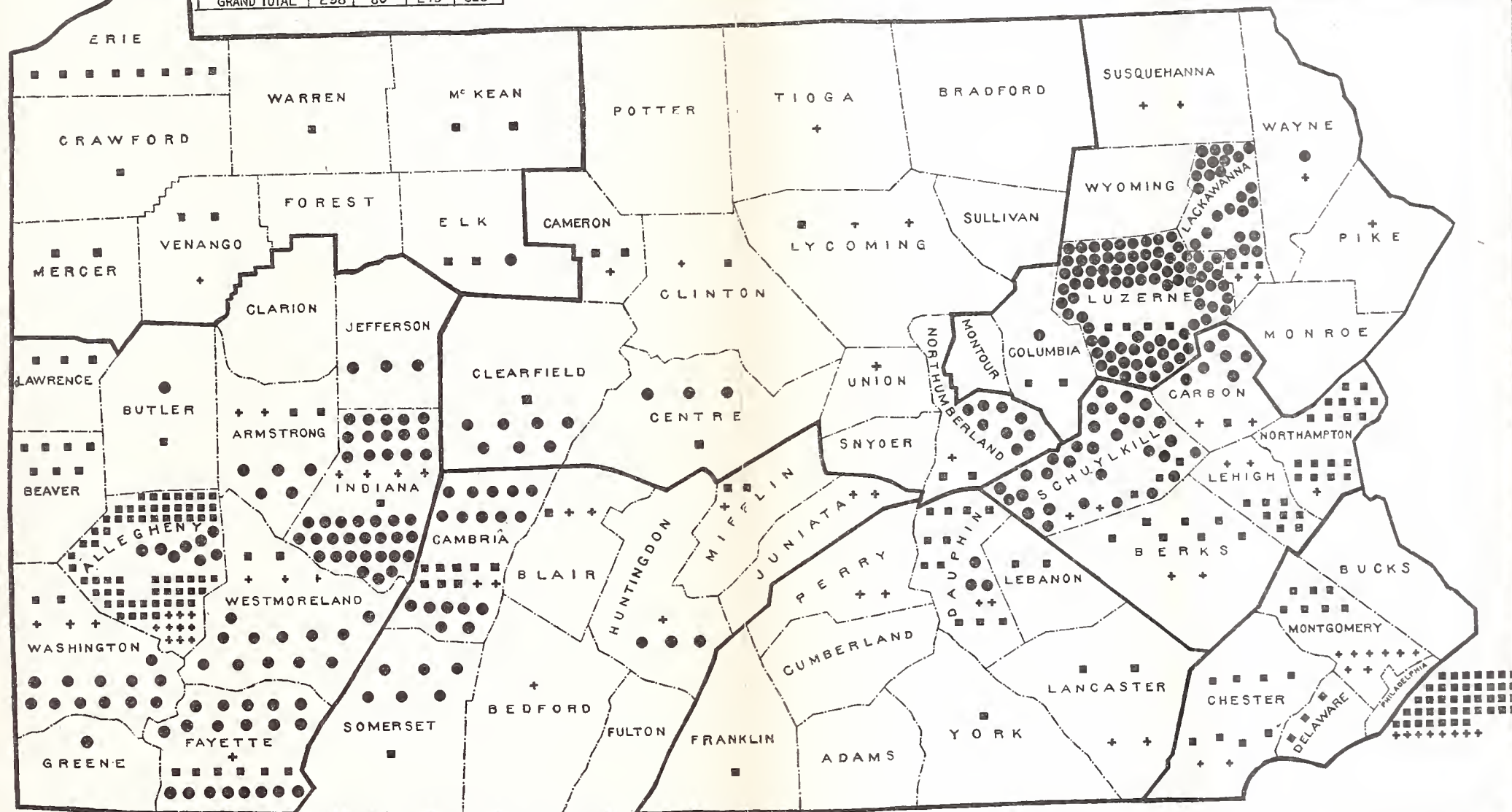
SUMMARY

	MINES	PUBLIC SERVICE	OTHER INDUSTRIES	TOTAL
JANUARY	91	27	70	188
FEBRUARY	116	22	91	229
MARCH	91	31	84	206
GRAND TOTAL	298	80	245	623

MAP OF PENNSYLVANIA SHOWING DISTRIBUTION OF FATALITIES FROM INDUSTRIAL ACCIDENTS DURING JANUARY, FEBRUARY & MARCH 1916

CAUSES

- FATALITIES IN MINES.
- + FATALITIES IN PUBLIC SERVICE.
- FATALITIES IN OTHER INDUSTRIES.



PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY

PREPARED BY THE BUREAU OF INSPECTION

INDUSTRIAL ACCIDENT PREVENTION CONFERENCE HELD IN THE HALL OF THE HOUSE OF REPRESENTATIVES, STATE CAPITOL, HARRISBURG, PENNSYLVANIA, THURSDAY, MARCH 23, 1916.

The Industrial Accident Prevention Conference, called by Governor Martin G. Brumbaugh, was probably the first assemblage of its kind ever held in the United States. Under the auspices of the Commonwealth of Pennsylvania, heads of great industrial plants, representing capital estimated to aggregate \$5,000,000,000, met with leaders of labor, representing undoubtedly 1,000,000 workers, and with officials of the State and National Governments for the formulation of plans to reduce the tremendous toll of life and health of workers by accidents in the diversified industries in Pennsylvania.

Commissioner John Price Jackson, of the Department of Labor and Industry, brought to the attention of Governor Brumbaugh, prior to the calling of the conference, the record of injuries resulting from industrial accidents during the first two months of 1916, with the information that if the numbers of such accidents continued at the same ratio throughout the year they would probably result in the deaths of 2,500 workers and the injuring of 300,000 others in Pennsylvania alone before the end of 1916.

The toll of industrial accidents, within the State, for January, February and March, 1916, based on reports received at the Bureau of Statistics and Information, of the Department of Labor and Industry, is indicated in the following table:

1916.	Killed.	Injured.	Total.
January.	188	13,336	13,524
February, ...	229	24,253	24,482
March, ...	206	26,732	26,938
Grand total, ...	623	64,321	64,944

Acting on the information regarding fatalities and injuries from industrial accidents, the Governor, early in March sent the following letter to officials of the largest industrial corporations in the Commonwealth:

Governor's Letter.

My dear Sir: The fact that nearly forty thousand of the workers of this State were injured in January and February, and that more than three hundred and fifty were killed, creates a problem that deserves the careful consideration of the foremost industrial thinkers in Pennsylvania.

With the idea of devising means for reducing this great number of deaths and injuries, I have decided to call a conference of industrial leaders of this State to be held in the Hall of the House of Representatives, Thursday, March 23.

Representatives of the National and State Government will meet with the leaders of industry in Pennsylvania to devise the best means of lessening this great number of accidents.

I am vitally interested in the successful outcome of this conference and will greatly appreciate your personal attendance at this meeting.

Will you be good enough to advise me of your part in this conference. May we count on your presence and assistance to the end that we may lessen the accidents in industry and advance the industrial welfare of the State.

Yours very truly,

(Signed) M. G. BRUMBAUGH,

Governor.

Prior to the issuance of the Governor's letter, Commissioner Jackson had been assured, in response to the following letter, sent by him to officials of industries, that many employers would co-operate in the conference for the prevention of industrial accidents:

Commissioner Jackson's Letter.

"The record of accidents in this State for the year and date are appalling. Thus, the total number reported for the month of February was 24,475, with 222 fatalities. Mr. Paul N. Furman, Chief of the Bureau of Statistics and Information of the Department of Labor and Industry, who receives the accident reports, states that he has evidence that we are not receiving, as yet, complete return from all companies, and as a result there is reason to believe that the number

reported for the coming months will show an increase over those for February. A fair estimate, based upon the February reports, would indicate a minimum accident toll in Pennsylvania alone for this year of 300,000 persons, with deaths ranging from 2,500 to 3,000.

"Of course, we all recognize that the greatest blow to us is the suffering caused by the maiming and killing of our workers, but laying aside this most impressive feature, which is comparable with that occurring temporarily in Europe, we find the actual money cost to industrial corporations is large. This cost arises partly from the compensation which must be paid under the new laws in the form of medical services and weekly payments, and partly by the very material disarrangements caused by the absence of skilled and effective men who are needed in their respective positions.

"The situation is really so wasteful and terrible that the Governor feels that the whole people of this Commonwealth should be jarred to keen appreciation of the conditions.

"We believe that the best way to do this is for a group of such men as yourself, who are real leaders of industry in the State, to get together for a day, for a conference on how to reduce the present rate of death, injury and loss.

"If you will join with a number of others of equally high station in the industrial and financial world in such a meeting at Harrisburg, we believe your action will do much to bring our people to the realization of the need of systematic and continuous training in carefulness and safe methods.

"It is for this reason that I am writing to you, and to men in similar relation to other large corporations having many employes, rather than to your technical employes who have direct supervision of accident prevention. The gathering together of these technical employes is most excellent, and we have been having such conferences frequently, but it is only through the participation of the real leaders of industry, that we can hope to arouse the public.

"As the employe himself is, after all, the element upon which the work must be centered, if great results are to be accomplished, it is desirable that we bring into this conference some of the labor leaders of the State.

"If the Governor should call a meeting such as I have suggested above, to be held in the Hall of the House of Representatives, Harrisburg, on Thursday, March 23, could I assure him that you would attend such a conference? We hope by the presence of yourself and others in similar station among the industries, to quickly formulate the best procedure for carrying out this accident prevention movement."

Accident Prevention, Theme of Conference.

More than 150 employers, representatives of labor and governmental officials attended the conference sessions. The problem of accident prevention was analyzed from every point of view in the speeches and discussions. Committees were named from the ranks of the delegates to represent the separate industries of the State in the promotion of safety in industrial work.

The final conclusions of the conference were embodied in resolutions drafted and passed by the conference. These resolutions advocated the establishment of safety organizations in all plants and the delegates to the conference pledged themselves to exert every effort for the establishment of such organizations.

The proceedings of the conference, giving the major portions of the formal addresses and informal speeches of the discussions on the various phases of accident prevention, are given in the following pages:

MORNING SESSION, 10 O'CLOCK.

GOVERNOR MARTIN G. BRUMBAUGH, Presiding.

ADDRESS BY GOVERNOR BRUMBAUGH.

My reason for asking you gentlemen to come here today is, as I explained in the call for this conference, the discussion of one of the most serious problems that confronts the industries of this State.

When we stop to consider that more than a thousand accidents are being reported by the industries of this State every day, and that out of that number more than eight are fatal, we realize that it is a wastage that the Commonwealth, the industries, and the workers can ill afford.

In asking each of you to come here I felt that you were the men who could do more to bring about a change of these terrible conditions than any other group of men that could be assembled in this State.

You are all of you, as I take it, deeply interested in the problems of preventing accidents, from more than one point of view. This accident prevention work is an economic problem, with the humane and the financial sides both of very vast importance. I hope that

out of this meeting today will come a good that will result in the saving of pain and suffering to the workers, and those who are dear to them, and of time and money and good workmen, so necessary for the prosperity of our industries.

It was not until the Workmen's Compensation Law went into effect at the beginning of this year that we could obtain any accurate idea of the tremendous number of industrial accidents in Pennsylvania. We knew that there were many and felt shocked when the official records for 1915 showed that 1205 were killed and 61,540 injured.

When, however, the 1916 reports began to come in, in what we realized would be much more complete shape, all of us who were interested in the welfare of Pennsylvania, and its workers and industries, were appalled and felt that the situation was one which demanded the most serious consideration of the foremost industrial thinkers in this State.

It is a problem that needs the attention of the leaders of labor as well as the leaders of industry. It needs the attention of the safety engineer, of the financial experts, and of those who counsel our great labor organizations.

Being the national leader in the scope and extent of its industries, it is only proper that Pennsylvania should be the leader in efforts to care for its workers.

Since the creation of the Department of Labor and Industry in 1913, there has been a constant and evergrowing interest on the part of the employers of this State in the problem of conserving the lives and limbs of the workers of this State. "Safety First" has been a slogan which has grown to mean much. Pennsylvania has done more than any other State in the Union to save its workers, and yet with all the effort that has been expended, the results seem to be pitifully small when we contemplate the vast number that has been injured.

There are more and better safety organizations in the mills and mines of this State than there are in similar lines of work in any other State, and yet, with all the good work which is being done by these organizations, there is still an almost unlimited field.

There is no question but that the number of accidents can be reduced to perhaps one-fourth of the present number. I do not mean that this can be brought about at once as a result of this meeting, but we can go from here with the idea of doing our share in solving the problem, and we can come together again and again until that very much desired goal has been attained.

Pennsylvania employers have been quick to realize the value of safety organizations. Employes have been equally quick to respond to the demand that they organize for self-protection and for the succor of fellow workers. The result has been undisputed leadership in the field of safety work, but there is so much still to be done that it seems that little more than a start has been made.

Actual experience has shown that where safety corps have been organized, it has been possible within the space of two years to reduce the number of accidents by about eighty per cent, and to produce a corresponding saving in money. We are still familiar with the great hardship which an accident entails. It means to the family the striking down of the breadwinner; the curtailment, if not the permanent impairment of his earning capacity; and, in some cases, his death. All of these hardships bring untold suffering to the worker and to all those who are near and dear to him. Not only the man who is injured suffers but his wife and his children suffer with him.

In addition to the physical and mental anguish of the worker and his loved ones, there is a distinct financial loss to the worker, as well as to his employer.

The financial loss to the worker is made up to some extent by the enactment of the Compensation Law by the last Legislature, perhaps the most advanced and wisest piece of legislation that has ever been launched in this State, and I want to take this occasion to thank the employers of Pennsylvania for the readiness with which they have accepted the provisions of this act. There is really not a firm or corporation in Pennsylvania which has not accepted the provisions of the act.

There are two railroads which chose to reject its provisions, but they are railroads whose interests lie principally elsewhere and, as they have made it a policy to reject the act in other States, they simply carried out the same line of policy in rejecting in Pennsylvania.

There were two other foreign corporations, engaged in a non-hazardous business, which rejected the act.

Outside of that, there are practically no rejections except here and there a professional man, who has rejected in so far as applied to his clerical help, where there was really no danger.

The great railroad corporations, the mining companies, the vast steel interest, the textile manufacturers, and all of those great groups of employers which go to give Pennsylvania her splendid leadership

in industry, have accepted the Workmen's Compensation Act and are complying with its provisions in a manner which is at once gratifying and shows the splendid law-abiding spirit of our citizenry.

Now, this Compensation Law has entailed a considerable financial burden upon every employer in this State, no matter how small or how great his interests may be.

It is my hope that one practical result of our deliberations here will be that we can devise a way in which this financial burden can be entirely overcome; and that the Compensation Law, instead of entailing a serious liability, will result in a substantial financial saving to the employers of this State. This can be done by giving the closest attention to this matter of accident prevention.

Consider for a moment the loss that results from accidents. My attention has been called to the fact that, in one of the vast steel plants of this State, the amount of time lost by men who were injured in one month equalled the loss of an hour and a half by every man employed in this great establishment. When you consider that this establishment employs 20,000 men, you can readily figure that there was a loss of 30,000 hours by the workers for that corporation in one month. This meant not only a loss which the employers cannot afford, but the serious interruption of the continuous operation of its business, and the taking from the ranks of its employees men whose services could ill be spared.

Computing this loss of 30,000 hours on a very, moderate basis, this means a loss of approximately \$6,000 in a month or \$72,000 per year to the employers; an even greater loss accrues to the employees.

Now, if by safety methods, by the proper introduction of safeguards, and the proper organization of safety corps, this loss could be cut down from \$72,000 to even \$50,000, there would be not only the relief from pain and suffering among the injured, but also an actual financial saving, which would more than compensate for the total cost of compensation; in fact, it would leave some money to be applied to dividends.

This has been figured out to a nicety by the greatest of all industrial combinations, the United States Steel Corporation.

Beginning in 1906, a systematic campaign was undertaken to reduce the number of accidents. As compared with 1906 there were 532 men saved from serious injury in 1907. The number saved grew steadily, until 1913 when 2273 men were saved from serious injury. The total number saved from serious injury since the work was inaugurated in 1906, computed on the ratio per thousand employees who were being injured in that time, is 14,967, to and including 1915.

There has been a corresponding decrease in casualty expense. This has been figured out for the three years 1911, 1912 and 1913. In those three years 6,308 men were saved from serious injury. The gross saving in casualty expense for the three years was \$4,775,692.64. There was spent for safety in those three years \$2,003,712.29, making a net saving in casualty expense of \$2,771,980.35.

A corresponding saving can, I hope, be made in almost any line of business. Not only is there a very serious duty upon the corporations of this State to save their men and money, but there is just as deep an obligation upon the employes to co-operate with their employers and save themselves and their fellow workers, and so advance the interest and prosperity of their employers; and, consequently, their own prosperity and happiness.

The great success of any safety movement is co-operation. No substantial headway can be made without the acquiescence of both the employer and the worker.

The great complaint of employers is that a vast proportion of the accidents which occur are due to the negligence of the employe. That may or may not be true, but, in any event, it is the prime duty of the employer to adopt every means to combat carelessness and negligence; and it is just as important for the leaders of the workers to see that the efforts of employers to bring about carefulness and attention to personal safety are promptly and cheerfully complied with.

Our industrial movements and our labor movements are both led by men of broad experience and wide understanding, and it is my hope that you will get together here and, in a spirit of co-operation, work out plans which will mean less suffering, fewer injuries, fewer fatalities, and greater saving, both to the employer and employe.

ADDRESS BY COMMISSIONER JOHN PRICE JACKSON.

Many of those present, participating in this conference, direct the enormous power produced by the larger aggregations of capital in Pennsylvania, which are formed by the investment of the savings of hundreds of thousands of individuals.

Others here represent the immense power obtained by great numbers of workmen pooling their individual strengths for a common cause.

The remainder of those present are representatives of the Government who are particularly responsible for promoting the prosperity and welfare of the workman and of industry.

The Governor, for the purpose of reducing the appalling number of industrial accidents, has thus concentrated here today three potent human influences, capital, labor, and government. He has clearly laid the problem before you, the solution of which we are today to endeavor to forward.

The Governor has pictured to us the toll of suffering and financial loss going on in this Commonwealth and which for the whole nation must be comparable with that of a great international war. It is, therefore, unnecessary for me to review the existing conditions, but I will lay before you such implements and information as seem to me will be useful in our work today.

First, it is well to review the principal departmental agencies that are at the disposal of the Governor for aiding in the work.

The Bureau of Mines has, scattered through the mining region, inspectors who can disseminate information on the best safety and health measures for application in the mining industry.

The Public Service Commission has a corps of engineers and experts who are available for the same purpose.

The Department of Labor and Industry is similarly equipped for service of a similar character for labor and industry in general.

The Department of Labor and Industry has six important internal subdivisions, all closely bound together for the promotion of the same purpose: namely, the improvement of the safety, health, and welfare of the workman, and the advancement of the prosperity of Pennsylvania's industry. The Bureau of Inspection of the Department, by co-operative activity with employers and employes, aims directly to reduce accidents; the Division of Hygiene and Engineering endeavors to improve the conditions of health by which the workman is surrounded and to develop improved industrial methods; the Board and Bureau of Compensation represent a sane system for the uniform and prompt payment of compensation to the injured workman or his family; the Bureau of Statistics gathers information concerning accidents, to be used in preventing them, and publishes much data of value in promoting Pennsylvania's industrial activities; the Bureau of Arbitration aims to bridge the gap between employer and employe and gradually bring about an understanding which will banish the strike and lockout; and the Bureau of Employment is perfecting its machinery for bringing the job and man together quickly, thus eliminating one of our greatest present human wastes.

Above all of this administrative machinery is the Industrial Board which may make binding rules and regulations for the conduct of labor and industry. This Board has wisely used its power only after having freely consulted practical employers and employes, and thus its rules have been so adaptable and useful as to have been adopted with good spirit throughout the Commonwealth. The Industrial Board should prove an important implement in forwarding any program this meeting may formulate.

Observation of information presented by the Bureau of Statistics of the Department of Labor and Industry, shows great possibilities for the prevention of accidents. If we inspect a chart showing accidents and their causes, it will be seen that there are relatively a large number of accidents due to falling materials. Many of these can be wiped out by the installation of proper toe boards, bulkheads, floors, etc., and by properly enforced regulations with reference to the piling of material. Again it is seen that a relatively large number of accidents is caused by ladders, and a goodly proportion of these are the result of rungs breaking, slipping ladder feet, etc., and can be corrected by using only properly constructed and tested ladders. Many other accidents can be prevented by having proper instructions given as to the placing of ladders and as to how to mount and descend. In like manner, there are a good many slips and falls which could be avoided by taking out irregularities in pathways, by placing guard rails, and by roughening slippery places.

A second and much greater reduction in accidents, can be obtained by earnest, active study on the part of each person connected with an establishment, with the view of training himself to see danger and to avoid it with scrupulous care, both for himself and his fellow-worker.

In order to forward the work of this conference, or such action as it may take, permit me to submit the following suggestions as to a program, which in my judgment is essential to bring the human industrial organization into proper condition and its individuals to an attitude of mind which will reduce accidents to the least possible number:

The first step, and undoubtedly the most important, is to form a safety organization. This safety organization should be headed by the chief executive of the corporation, and should include within its ranks representatives from every official status and every classification of employes. The organization should be so made that its personnel may, from time to time, be modified in order that as many men connected with plants as possible may have placed upon them a personal responsibility for the safety of the plant and its people.

Committees should be appointed for the studying of this and that phase of the plant activity and to report back to the parent body recommendations which will tend toward the accomplishment of increased safety. These committees, as time goes by, should include all of the members of the organization as they change in personnel, or, new ones as they are created. The chief executive of the organization should be the greatest individual source of inspiration, and his attitude, energy and earnestness should put every employe and official under his direction, upon his mettle. The whole organization should be pervaded by the spirit of democracy and co-operation. The suggestion and advice of the least responsible workman in the establishment should be given the same thoughtful and deferent consideration as suggestions made by a superintendent of large power and control.

This organization having been brought together will have a number of cardinal activities to enter upon, among which are those enumerated below:

1. The arrangement and holding of safety and health meetings; these meetings should not only include training for all, from the president down, in understanding danger, and in learning how to avoid it, but should be developed in a way to produce interest and enthusiasm for the great humane cause involved.
2. Dangerous places in and about the establishment, or the machinery contained therein, or as to the practices of performing work, should be eliminated by safeguards and otherwise, so far as humanly possible, while keeping in mind the duty which must be performed. In other words, the plants should be constructed so that there will be to a maximum extent, both as to equipment and practices, "service with safety."
3. Danger signs should be placed at all points where they can be made available, either to jog the attention of the man who is entering a necessarily dangerous place, or to warn those who otherwise would unwittingly place themselves in jeopardy.
4. Clean-cut attractive bulletins should be displayed in prominent places, and should be of a character to aid in the educational work of the officials and the workmen.
5. Men, or officials who are reckless, or who disregard the safeguards which have been established, should be disciplined rigidly.
6. Every incentive should be offered in the form of prizes, certificates of merit, or any other device which the organization may consider good, in order to inspire everybody to the task.

7. The administration and the handling of the democratic organization should be worked out in such a manner that every man from the president down, will feel that its actions are those which represent the sentiment of the mass. There should be no paternalism, nor should there be looseness and lack of business method.

8. The organization should take up the conditions of health in work places with exactly the same system as are taken up the conditions of safety. The questions of lighting, ventilation, heating, character of labor, dust, etc., are matters which affect both safety and health, as likewise are sanitation and many other elements which determine the keen minded strength of those employed. Not only will this consideration of health save accidents, but it will also save much financial loss to all concerned by reducing sickness contracted while on duty.

9. The safety organization should have a first aid system of the best character, and should have at hand the best possible medical service for handling cases of either accident or sickness. The practice of having untrained men give other than the very first aid at the instant of the accident should not be countenanced, but the properly trained medical man should be on the spot when needed.

10. The factory safety organization should be tied up, through a representative, with the Department of Labor and Industry, in order that that department may become to a maximum extent, a co-operating agent for assisting the organization in performing its functions with the greatest efficiency. This function of the Department is infinitely more valuable to the Commonwealth of Pennsylvania and her industrial peoples, than its function in using the police power. The safety organization should not only be the recipient of this kind of aid from the various interested branches of the Government, but should be continually transmitting useful suggestions to the Departments which can be disseminated to other industrial establishments throughout the State.

11. The safety organizations should be prepared to join with the Industrial Board of the Department in enabling that Board to make the most practical and wise use of its great power in developing rules and regulations for reducing sickness and accidents, and in perfecting conditions of labor.

12. Of equal importance to the safety organization is the proper training of youth in the school. We have in Pennsylvania adequate laws, largely fostered by the Governor, under which at the expense of the public, vocational day, night, and continuation schools can be made quickly available to every boy and girl in the Commonwealth.

If the boys and girls who are to go into industry have received suitable training in such schools they will start their work in life equipped with a knowledge of industrial practice and ethics which will go far toward improving the safety, health, and other conditions of labor. Furthermore, through these schools,—particularly through the great system of continuation schools, which the boy and girl attend for part time while at work,—we will rapidly obtain workmen of a higher grade of intelligence and skill. This will materially and rapidly raise the efficiency and prosperity of Pennsylvania's industries if the effect of similar schools, long established in Germany is any criterion. The night schools have the further function of giving the non-English speaking foreigner an opportunity of learning the tongue of his adopted country and her customs to the advantage of his health, safety, and usefulness as a worker and citizen. You who are here have the power, by the earnest and continuous use of your influence, to have such schools quickly established wherever they are needed and to see to it that they are so arranged and managed as to perform properly their purpose.

The Governor has indicated to you, not only by his offer of co-operation today, but by his entire career as a candidate for Governor, and as Governor, that he is deeply anxious to make his administration of the greatest possible service to the industrial people. Permit me to say that I am confident that not only the Department with which I am connected, but all other Departments related thereto, are supporting the Governor in this attitude with the utmost earnestness and enthusiasm. We are ready to take hold of our share of this program, as we have been endeavoring to do in the past, with energy and good spirit, and only ask in return that you will accept and make use of this offer. If such a coalition of Government, workingmen, and industrial officials is perfected, I can see ahead a saving in suffering and financial wealth which will gradually reach enormous proportions. Moreover, the co-operative perfecting of safety work in many plants is leading to a better and more sympathetic understanding between employer and employe, and may readily prove to be the entering wedge which will eventually close the gap between capital and labor, so that their interests will become the same, and barbarous strikes, lockouts, and bickerings will give way to more sane and civilized methods, to the great gain of employers, employes, and the whole people.

ADDRESS BY SAMUEL GOMPERS, PRESIDENT OF THE
AMERICAN FEDERATION OF LABOR.

LABOR'S SHARE IN REDUCING ACCIDENTS.

Mr. Chairman, Governor, Gentlemen:—I can very well understand the courtesy extended and suggested by the diffidence of our good friend Mr. L. F. Loree, President of the Delaware & Hudson Railroad Company, that I may talk first. Sometimes, when we differ with other people, those speaking afterwards are afforded an opportunity to make a target of those speaking first. However, I assume that, having been invited by Governor Brumbaugh to participate in this conference, and to discuss ways and means by which this terrible slaughter, which is going on in Pennsylvania, may be either eliminated or minimized, there may be some things upon which we can agree in common. I doubt that it is possible for us to agree upon a well defined program that shall entirely eliminate, in so far as human ingenuity can eliminate, industrial accidents resulting in injury and in death.

May I be permitted to indulge myself in a few observations. Before addressing myself to what I with my fellow workers and associated trade unionists believe to be fundamentals, I think we must have full appreciation of what is meant by industrial progress, industrial development, industrial success and prosperity. Without discussing the economic value as to the great industrial progress which has been made, there are some things to which we ought to apply ourselves and our attention. In the last twenty years, I have given some attention to the subject of the conservation of our natural resources. I think the people, generally, of our country, have concerned themselves with the question to a very considerable degree.

Now, we are, all of us, interested that our great natural resources shall not be wasted, but shall be conserved not only for the present generation and time, but for the children and grandchildren and all those who may follow after us. There is a general unanimity of opinion upon that phase of conservation providing for the safety of our peoples by conservation of natural resources, but there is such an utter negligence, or lack of understanding and appreciation of the value of the conservation of human lives. We go on, and produce and produce, and the whole sum total of thought seems to be how quickly we can produce. The price we pay in the injury and destruction of human life is not counted as any appreciable expense in the thought of the owner in mine production, and as compared with quick transportation of products.

The men in the organized labor movement, have endeavored to impress the thought of conservation of the human lives upon the attention of all our people, upon employers, upon government, upon the civic, political, social, and industrial life, but it has all too long fallen upon deaf ears. Some one, here and there, may have been individually affected by the story of the slaughter in industry, but the sum total of collective action among all people has not been altered. There prevails the policy of indifference or lack of understanding, or being so busy in the great workaday world's affairs, they have no time to consider the safety and welfare of the great mass of the workers of our country, and frequently our appeals and the presentation of facts have been utterly ignored. In so far as actual results are being secured it was necessary to resort to the very things which in the last remarks of our honored Chairman, have occurred in the industrial affairs of our country.

While we stand with him in trying to prevent and avert strikes and lockouts, and we have done something to accomplish that result, may I call attention to the fact that strikes and lockouts occur not in "barbarous countries," but only in civilized countries. Strikes and lockouts are unknown in barbarous countries. Wherever you find a strike, there is a long nurtured feeling against political or industrial wrongs, and such manifestations in barbarous or backward countries end in incipient revolutions or revolt.

The strike is perhaps not the best way to settle the industrial disputes between employers and employes, but there comes a time in industries when, were the workers to endure the conditions which have prevailed, would mean a riveting of the shackles of slavery upon them, and it is the strikes that attract attention, and arouse the people to the wrongs existing, and to the rights which ought to be secured. There is no better illustration than that of the conditions of the miners in the anthracite coal fields before and after the strike but as I say, as one of those of my fellows organized in the labor movement, I believe that the strike and lockout should be resorted to only when every other means of adjustment has been exhausted.

We have in addition to the killing and the maiming of our workers in industry to which our honored Chairman already called attention, industrial and occupational diseases, and the effect that these diseases have upon the lives of the workers. The diseases cause the workers to deteriorate, they decrease their efficiency, their ability to work, render them invalids, or incompetent, and shorten their lives prematurely by a long term. Occupational diseases and those who suffer from them, are not sensational events; they do not reach and touch the average attention and understanding of the busy citizenship of our

Commonwealth; the health and the lives of innumerable workers are undermined; industry is deprived of the value of their labor, and the country and the State enters it on the debit side of the ledger as the recorded debt of large numbers of our people.

I mention this fact to you for this reason; that, until a few years ago, and until the constructive movement of the men and women in the needle industries, the needle industry went on, and lives were gradually ground out under the sweatshop system in which these humans were made the slaves of the workshop, and like good Pharisees, we walked upon the other side and expressed our deep sympathy, our academic sympathy, which found no response anywhere of a remedial character until the labor movement began the organization of these needleworkers, and made the demand for the abolition of the sweatshop, the sweaters, and the intermediaries who profited from the employers and the workers, and until sanitary conditions of standards were established in co-operation with the workers in the needle industries and with the employers of labor. Standards have been established, health improved, character strengthened and citizenship made more ideal.

I remember the difficulty with which the railroad organizations have been trying to impress upon the government of the United States, that there ought to be a system of uniform couplers by which the cars of the different roads interested would have couplings of a uniform character, and thus promote the safety of life and limb of the man whose duty it was to couple cars on trains. I remember the difficulty with the opposition, that we had to overcome and later the difficulty we had in overcoming the opposition of the railroad representatives in the enforcement of the law and the requests urged from year to year for a long series of years for the enforcement of the uniform coupler law. Now it is the law and in operation. I remember the difficulties we had in securing the abolition of tenement house and home workers, the difficulty we had in securing initial provisions for safety appliances in shops and factories, and the difficulty we had in trying to get the best system of safety in the mines.

We have seen where the rule has been that the miners shall regulate and burn out the first part of their safety lamps before entering into the mine, that where men have gone into their work in gaseous mines, after disregarding the rule with impunity many times, they have ignited their lamp in the mine too often and explosion has occurred. Now, in connection with that feature of it, and that which is called negligence or carelessness of the workers, I think it is well to call attention to this fundamental fact; that is, when men are required in in-

dustry to speed up to the fullest limit of endurance, you cannot expect, after some period of time, these men who have worked and worked every day under such conditions to observe the care that men in ordinary normal physical condition would exercise.

I venture to make this statement without fear of successful contradiction, that, as a rule the accidents which result from what is generally known as carelessness or negligence, occur because men have worked too long hours in that day or the days previous.

We have presented to the employers of labor the proposition, and made the suggestion from time to time without number, that the establishment of a normal work day of eight hours makes for better workmanship, greater reliability, and larger percentage of production, greater efficiency, greater safety.

The shorter workday is the most fundamental proposition of economic safety that is presented in any way and by any agency. It may be that some employers of labor refuse to grant the eight-hour workday upon the supposition that to concede that, the workers would accept it as a yielding of the employers' prerogative, and that with the achievement of the eight hour day, the workers will become too independent or insistent. Now, as to the character of their independence or insistence, I shall not discuss, except to say, that when men have reasonable time after their day's work for rest, recuperation and opportunity of reading, and studying and of consulting with their fellows, that they usually become better acquainted with the conditions of life, and while having a fuller consciousness of their rights and privileges, have an equal understanding of their duties and their obligations.

This is the situation we find among the Railroads' Brotherhoods; the organizations of steam railroad men of the country have presented to the employers or the railroad management, among other things, the demand for an eight-hour workday. Now I can readily understand, I think, not quite as well perhaps as the managers of the railroads do, that there can be absolutely no strict, uniform, eight-hour day, without the possibility of meeting an emergency which might arise, nor do I believe the Brotherhoods want to place the managers of the railroads in such a position. But I believe men should have at least eight hours continuous rest between one day's service and another, unless some unforeseen emergency arises that ought to be met and overcome at the moment, and no one thing could contribute more to the safety of the traveling public, to the safety and benefit of the railroad, nor to the greater benefits of transportation of the product, or to the men themselves, than can be devised in this voluntary agreement between the railroads and the Railroad Brotherhoods for the establishment of an ordinary maximum workday of eight hours.

There is perhaps no book better written, containing within its pages higher authority upon the subject of the terrific poison known under the term of fatigue than is the book of Miss Josephine Goldmark, under the title of "Fatigue and Efficiency," and I commend it to the consideration of everyone here, or anyone who is interested in that sacred thing and its safety, known as human life. I am not an agent for that book, nor have I the slightest interest in it directly or indirectly, but I think it will have served a great service for a better and mutual understanding of what is meant by overwork or of what is meant by fatigue.

The Workmen's Compensation Act of Pennsylvania and of other states has been the one great feature that has brought the first intimation of the extent of this human slaughter, which had been going on before the Workmen's Compensation Act was written upon the statute books of Pennsylvania. If that Act had not been upon the statute books now, we would never have known of the great number of accidents and the number of deaths which have occurred during January and February, of 1916, and this conference would never have been called, nor the Governor would not have known any more than any citizen of the State would have known, of the tremendous number of deaths and accidents which have occurred in Pennsylvania during the months of January and February of this year. What has occurred in the awful toll of men whose lives have been snuffed out in the past, no one can know. It is the humane legislation of the Workmen's Compensation Act that has disclosed to the Commonwealth of Pennsylvania and to the other states the accidents which have occurred.

I may say this in passing, if sometime here or elsewhere, the statement may be made which I have heard made in other places that the drinking habit of the working people has been the main cause for industrial accidents, the statement is wholly unwarranted, there is no evidence to sustain the statement that there are more industrial accidents on Monday than there have been on any other day of the week. The New York Workmen's Compensation Commission states first; that there is but little variation in the number of accidents in industry in the State of New York between those which occur on Monday and those of any other day of the week; and second, this other fact; that inasmuch as the accidents are reported, the hour, the day, and the minute of the accident, so far as it can be correctly reported, data furnished the New York Workmen's Compensation Commission have demonstrated that the largest number of accidents occur after the fourth hour of the morning's work, and after the fourth hour of the afternoon's work. In other words the bulk of these accidents is not caused by what you call carelessness or negligence, but

is indeed the result of overwork and fatigue, when the human mind can no longer have the tense grasp upon itself, nor the human frame the ability to adjust quickly to the every motion of the machine which is driven at the topnotch speed.

May I second the suggestion made by Dr. Jackson, Chairman of this meeting, in urging industrial education and vocational training as one of the requisites for preparedness in every sense of that term whether it be political, industrial, civic or military. Up until the breaking out of this titanic struggle on the other side of the Atlantic, our great captains of industry have had to look to foreign countries for the larger part of the men who have a knowledge of the mechanical devices, of each part, and of the whole product, until now, to a considerable extent, the directing force in the industrial plants of our country is in the hands of non-Americans. If we should get into real trouble with any of the countries, and I pray that we shall be able to avoid it, we shall be in a very nice mess with the industrial affairs of our country, due to the causes, one of which I have already mentioned.

In our country, more than in any other on the face of the globe, there has come tremendous development and specialization in industry, division and subdivision of the work, so that the workers in the modern great plant do but an infinitesimal part of the great whole. Day after day it is the same thing done over and over again. The worker does not know an entire part of any process of production, and does not have the slightest knowledge of any other part of the industry.

Our systems of education in our states must have in the curricula for the teaching of the boy or girl, industrial education, vocational training, civics, domestic economy, and not in extra time, but as an integral part of the school education. There is before the Congress of the United States a bill, which has a good chance of passage during this session of the Congress, to secure federal financial aid for state colleges and universities, and other institutions, and which shall establish a unit system for the education of the youths of the State in industries, in civics and domestic economy. A law enacted two years ago, applies in the same way to the agriculturists and to horticulturists of the country, and has already accomplished wonders among our agricultural and horticultural people, and if the reports which come to me are accurate, and I think they are, of the effects of this education upon our boys and girls, you will not find in the future that tremendous rush from the farm to the city.

The American labor movement is endeavoring to secure shorter workdays for the working people. The tremendous influence of a normal workday with opportunity of rest and recuperation, and the

cultivation of the best that is in a man, makes for a great step in advance and for real progress and safety and economy, and it ought to receive the favorable consideration of every employer of labor. It ought to receive the employe's earnest endorsement and encouragement rather than his opposition. If I may divert from the general trend of this subject, to endeavor as briefly as it is possible for me to refer to incidents and facts to prove the contention, I might say in a hurry, that, in no country on the face of the globe where the hours of labor are long, is there real, permanent, industrial progress, as compared to the countries in which the hours of labor are shorter; that in no country on the face of the globe are employers so well off in the world's affairs and their prosperity so safeguarded as in the countries where the hours of labor are shorter. If long hours of labor mean industrial and commercial prosperity, then China ought to be at the head of civilization. I commend the proposition for the shorter workday to the employers of labor as one of the great steps for economy and safety.

Let me say in addition to the demand for better standards of life among the workers, that, no better authority can be given than that of General Gorgas of the United States Army, who sometime ago, said that the result of his observation with higher wages for the working people showed that they would increase their longevity on an average of more than thirteen years.

An incident occurred some few years ago, of a large employer of labor in Pennsylvania, who having become converted to the welfare of the worker and safety work of employes, converted by reason of experiences which had come into his personal life, became convinced that he ought to do something to guard the lives and limbs of the workers in his employ, and he immediately undertook to get an efficiency engineer to give that subject his entire attention, and paid the man a large salary, a decent salary anyway. The man entered upon his work, and found himself blocked on every hand by foremen, superintendents, and others, and inspectors who had the belief that that program was going to interfere with showing of results to the heads of the concern, until this engineer expert for safety reported to his employer, that it would be utterly impossible for him to continue his services unless he was given authority to direct the men and officers in the employ of the company upon the particular feature of safeguarding of life and limb. He was given that authority, and from that day there was such a material decrease in the number of accidents and deaths, that the engineer's salary was more than ten times returned into the company's coffers, by reason of the prevention of these accidents and liability suits and the better and greater efficiency of the workers while employed.

Speaking of the labor organization, I may add a word here. There are a number of our labor organizations which have in their open meetings, or special meetings, special courses in which the workers are given education and training regarding first, efficiency; secondly, expert advice and safety. The official journals of the United Mine Workers, of the Railroad Brotherhoods, of the Carpenters, of the Machinists and others, all have in each issue of their official journals articles conveying the best information, and expert advice on efficiency in service, and for life and limb safety, plans and designs are published, and prizes given, or offered for the solution of problems, all in accord with the efforts to teach the workers their duty to protect themselves, and to be able to give efficient service.

I have in part read the report of the Department of Labor and Industry of Pennsylvania, with which all of you are familiar. I shall not take the time to explain the array of facts, and the splendid manner in which they are shown of this terrible condition which has prevailed. I have in my hands the Monthly Bulletin of the Department of Interior, and the monthly statement of coal miners fatalities in the United States for November, 1915. I commend every thoughtful employer and worker and the public officials to consult that bulletin. I also have with me a copy of the report of the Bureau of Mines which was released on Saturday, February 26th, showing the terrific conditions which prevail in mines, notwithstanding the fact generally, that there is a diminution of the number of accidents. Again let me urge you that instead of trying to secure the establishment of better relations between the employer and the employe by the law of the land, or by the Commonwealth of Pennsylvania, that it be done through the results of mutual conference with the representatives of employers, and with representatives of employes, to work out the best possible scheme for accident prevention.

There is too much waste of this sacred thing called human life. We ought to work for the conservation of human life. We are all horrified, and we are all saddened by the slaughter which has been going on, and is still going on in the battlefields of Europe, and it is our duty to see to it that some way is proposed, which we hope to perpetuate, to stand for the ideals in the nation's work and to look into our own affairs, to tend to our own house cleaning, and see to it that our men, the men of today, the children of today, and the men and women of the future that are to make up the citizenship of this republic have health and strength, physically and mentally, their ideals and ideas safeguarded, and given the fullest opportunity, and the widest development to perpetuate and glorify this great republic of ours.

Resolutions Committee.

Mr. Herbert Lloyd, President of the Electric Storage Battery Company, then moved for the appointment, by Chairman Jackson, of a committee to draw up resolutions for the outlining of a proper program for the reduction of accidents. The motion was seconded by Stephen McDonald, President of the Central Labor Union, Scranton, Pa. The Chairman stated he would announce the personnel of the Committee later. He also announced that the Governor extended an invitation to all representatives at the conference to take lunch with him at the Harrisburg Club at 12:30 P. M.

ADDRESS OF L. F. LOREE, PRESIDENT OF THE DELAWARE
AND HUDSON RAILROAD COMPANY ON ACCIDENT PRE-
VENTION FROM THE VIEW POINT OF THE RAILROAD
COMPANY.

No question of any importance is satisfactorily considered unless we look upon it from all sides. I listened with a great deal of interest and pleasure to the presentation of the question as viewed by the State and the organization and activities which the State has put into motion. I listened also with great pleasure to the presentation of the point of view of Mr. Gompers, and the light he threw upon labor's side of the situation. May I say to Mr. Gompers that I have no intention of attacking him. I came here in the hope that we may be mutually helpful, and the side upon which I desire to direct attention I hope will interest him and I hope he will feel that we are mutually interested in urging consideration of it.

The direction of industries that no effort has yet sufficed to free from loss of life and permanent physical injury to workers imposes responsibilities that put mere lip service to shame. Whether those who bear obligations of management for the great industries of Pennsylvania carry those responsibilities with adequate realization of their seriousness is to be determined by acts, not words. But it may now be said, for those in charge of the railways and the anthracite mines, that they will always in the future be ready to do what they have done in the past, to consider every suggestion honestly intended to diminish these losses, to enter upon every safe experiment that bears reasonable evidence of practicability, to adopt any device or method that approves itself to those who comprehend the difficulties to be overcome.

Losses of life and limb from industrial accidents are appalling whether many or few; if one human life is lost or one human form is mutilated by an accident that might have been prevented, the result is appalling in a degree that no statistical summary or comparison can accentuate. Such losses are irreparable and without possible compensation. They should compel seriousness of thought and sobriety of speech. It would be as evil to consider pecuniary profits as an offset or excuse as it would be unutterably wicked to seek to derive political advantage or notoriety from these conditions.

The railway industry represents the utmost effort of mankind to overcome, by the artificial arrangement of weaker natural forces, one of the greatest and most universal of the laws of Nature. Nature ordained that everything ponderable should be inert and, again, that man should survive and progress only by conquering inertia. Man can create nothing, but by changing the locations and relations of things can set in operation natural forces that are creative. The railway is humanity's mightiest response to this condition of his existence. All other forces oppose the effort but by controlling the relatively puny force of the expansive gas which is formed by water heated to 212 degrees Fahrenheit, man is able to hurl railway trains, often weighing six millions of pounds or more, over hills and across rivers and valleys and through mountains, alike in the heat of summer and the freezing cold of winter. This is warfare, not cruel and criminal warfare of man against man for commercial or political advantage or to appease the ambitions or jealousies of leaders; but the warfare of man, industrious, organized and capably led, against reluctant Nature, fought in obedience to the Divine command that toil shall be the source of food and shelter and moral as well as material advancement. Those who realize the obstacles that Nature erects and constantly renews in protest against this rude interference with her rule of stability, wonder at the efficiency of the machine by which it is so regularly conquered, not at the fact that it sometimes falters or that men who waver or become inconstant in devotion to duty are sometimes killed or injured. These losses must not be called inevitable for the struggle and hope to prevent them must never relax or grow dim, but it is true that, considered in the light of the difficulties encountered, there is no department of human activity in which more has been accomplished, there are few in which even an approximate meed of success has been attained.

There is, however, one large class of wholly preventable railway accidents, but the means of prevention is in the hands of the State, as a political organization; the railways themselves are powerless. What has the political organization of the State done to prevent these accidents? The answer is, absolutely nothing. Fifteen lives per

day are, on the average, lost, in the United States by accidents to persons that occur because the victims are trespassing without right or claim of right upon railway property, against the rights of the railway and often endangering the safety of travelers. A few States have especially penalized such trespass but Pennsylvania, although such legislation has frequently been asked for by responsible railway officers, has done nothing. The following are facts reported by the Interstate Commerce Commission:

Year ended with June 30.		Number of passengers and employees killed.	Number of trespassers killed.
1911, ...		3519	5284
1915, ...		2037	5084
Decrease, 1911-1915:			
Number, ...		1482	200
Per cent., ...		42.28	3.79

These figures speak for themselves. They show that while the annual loss of life in the field to which the efforts of the railway managers must be confined has been reduced almost one-half; the losses in the field in which the State alone can be effective, have been reduced scarcely at all. A law of this State, effective since 1911, forces an extra and superfluous man to share the risks of nearly every train crew, but no law has ever been passed to protect any would-be trespasser upon railway property from the consequences of his trespass.

There is another direction in which proper legislation would materially aid in the reduction of railway accidents. It is notorious that much more than half the train accidents that occur are consequent upon failure to obey orders and observe rules that, properly carried out, would have obviated all danger. Many such disobediences and violations of rules take place without producing accidents, but every one of them is a trespass against the order of the community in that it endangers the safety of persons and property. No political leader or legislator is so ignorant as not to know these facts or that a long step toward the reduction of accidents would be taken in the enactment and enforcement of adequate penalties to punish these violations of order. No such penalties have been provided in Pennsylvania and unless the organizations of railway labor change their views and cease to protect conduct which threatens the lives of their own members, as well as of the public, none will be provided.

Automobiles killed 2,488 persons and other vehicles 2,381, in the United States during 1913. Is there in these figures no suggestion of healthy State action? Are the users of Pennsylvania highways protected by adequate statutes, adequately enforced, against the dangerous folly of the few to whose misuse of powerful motors and other vehicles most of this class of accidents are due?

These suggestions are not made in a spirit of mere criticism. They are prompted by a firm conviction that the most salutary result that could follow this conference would have come about if it should impel the political leaders to emulate, in the fields peculiarly their own, the efforts and efficiency that have so greatly reduced the dangers of the most dangerous of all vocations.

Conclusion.

Dr. Patterson then made a brief address on the subject of "Stream Pollution." Dr. Jackson then announced the following persons as members of the Committee on Resolutions: Lew R. Palmer, Chairman, Herbert Lloyd, R. S. Hubbard, H. C. Esling, Stephen McDonald, William H. Young, James H. Maurer, Homer D. Williams and C. C. Boner.

LUNCHEON.

Governor Brumbaugh was host at a luncheon given the delegates to the conference at noon at the Harrisburg Club. One hundred and seven officials of corporations, leaders of labor and officials of government attended as guests. At the same tables sat the representatives of \$5,000,000,000 of invested capital and representatives of millions of workers. Palms and potted plants were the decorations at the luncheon which was entirely informal, with no set program.

Paul G. Thompson, of the United Gas Improvement Company of Philadelphia, suggested, at the conclusion of the luncheon, that a rising vote of thanks be given to Governor Brumbaugh for his splendid entertainment of the delegates. Samuel Gompers, President of the American Federation of Labor, immediately arose and moved that the Governor also be publicly thanked for his attitude of patriotic devotion to the welfare of the industrial workers of the State by calling this conference in the interests of their safety.

AFTERNOON SESSION.

At the call for general discussion, Mr. Paul Thompson, Vice President of the United Gas Improvement Company, said:

"Mr. Chairman, Gentlemen: I appreciate very much the honor that Dr. Jackson has conferred upon me in asking me to attend this

conference. My whole heart is in favor of it and in sympathy with it, and I only want to say that so far as the company, which I have the honor to represent, is concerned, we are tremendously interested in the subject. It is my belief that the greatest good to the industries at large in the safety movement proposition, will come from a conference such as this, between men who are charged with the administration of their respective companies' affairs, as well as those of you here who represent labor organizations, and who may carry back to their men the benefit of the opinions they have gathered at such meetings as this. We are strongly in favor of it, and on behalf of the company which I represent, I pledge all the support we can give in representation at these conferences, or any information we have gathered, for the use of the industries at large."

C. L. CLOSE, of the United States Steel Corporation also spoke as follows:

"Not knowing that the leaders of labor and industry were to carry on this conference, but thinking that we were coming to hear the views of the State authorities, I feel somewhat out of place; but I do want to say that it was through the support given by Judge Gary and Mr. Farrell that we were so successful in the carrying out of our 'safety first' movement. We have spent in the neighborhood of \$500,000 on safeguards and we feel we have done what we could to prevent accidents for which the employer was responsible. It seems to me that the work from now on must come from the men themselves. In soliciting the men's efforts in this respect, we are doing it through Safety Committees. We have had as high as 12,000 men working on those committees and just at present we have about 5,000. This shows that the corporation is alert on the accident prevention work, and that efforts have been and are being made to spread the safety gospel to all the men. I have a suggestion to make: Mr. Palmer showed me this morning one of the Department's 'Monthly Bulletins.' It seems to me a very great deal of good could be done in that respect; that is, by the Department issuing small pamphlets, making them short and terse, to the men themselves. Perhaps it would have a greater effect on the men than if the employer issued the same kind of a circular."

W. B. DICKSON, Vice President of the Midvale Steel Company then spoke as follows:

"Mr. Chairman: I will have to follow somewhat along the lines of the talk just made by Mr. Close, who represents the U. S. Steel

Corporation, because it was during the time that I was with that corporation that I first became identified with the work of accident prevention.

"The Midvale Steel and Ordnance Corporation is a comparatively new organization, and embraces among its subsidiaries the Cambria Steel Company, which, we found, is thoroughly alive to the question. We find they have a splendid system in force which parallels that of the U. S. Steel Corporation. The Midvale Steel Company, located in Philadelphia, is also following up the subject along the same lines. Our other plants,—that of Worth Brothers Company, at Coatesville, and the Remington Arms Company, at Eddystone, are preparing to follow along those same lines,—the latter company being about now in course of construction. All I can say is, that those four companies are working in concert, attacking that part of the problem which we all recognize as an all important one, that is, the prevention of accidents."

Dr. Jackson then introduced Professor James T. McCleary, Secretary of the American Iron and Steel Institute, New York, who made the following address on "Hazards of the Steel Industry and Their Prevention."

ADDRESS BY PROF. McCLEARY.

Mr. Chairman, Ladies and Gentlemen: Sometimes an introduction such as Dr. Jackson just made is very embarrassing, for out of the depths of warm friendship a speaker may be introduced in language so promising that it is indeed hard for the speaker to live up to the prospectus. However, I am glad to be able to be here. Up until last night I thought it would not be possible for me to attend, as we have sickness in the family. I am glad indeed to be in the Capitol City of the great industrial State of Pennsylvania, especially on an occasion like this which promises so much good to all concerned. I bring the greetings of the American Iron and Steel Institute, an association of employers 1,500 in number, the heads of the iron and steel industry in United States and Canada.

Perhaps a word about the Institute might not be out of place, because it is germane to what I have to say. The Institute was founded to do certain things. It recognizes the fact that this is the age of light. That men of this day and age proceed in light rather than in darkness, and to this end the Institute collects statistics on production of iron and steel, to the end that persons may have them if they so desire. The Institute recognizes, also, that this is the

age of progress, and that nothing is done so well that it cannot be done better, and therefore, the Institute holds two meetings annually, one in May in New York, and another in October in some other city decided upon. At these meetings, papers are read and discussions held on how to make more steel and better steel and sell it cheaper.

The institute recognizes also that there is value in comradeship. In the language of the savage there is only one word for stranger and enemy. A stranger is an enemy. If one savage meets another in the forest and does not recognize him, instinctively his hand leaps to a weapon. The stranger to him is an enemy. And so it is today. Before men can become friends they must cease to be enemies. Hence, another purpose of the Institute is to bring together men engaged in honest competition that they may learn to know one another and become friends. The fourth thing is particularly fundamental to this meeting today. The American Iron and Steel Institute recognizes the fact that the men who labor in the mills and mines are more than so many human beings. They are human beings with hopes and fears, aspirations, affections and desires.

Our Institute serves as a clearing house, with papers and monthly bulletins showing month by month what each company is doing, what business is being done, because we know that the spirit of good work is contagious and when men see good deeds being done they seek to emulate them. In the prosecution of our work there is one underlying thought that is never lost sight of, and that is, under no circumstances do we ever infringe upon that precious jewel of every man's soul—his own self-respect.

There must be nothing tainting of patronage about the efforts we put forth to make better surroundings for the men. Just to illustrate what I mean: One day as I was working at my desk, a gentleman came in, and during our conversation, he happened to see some photographs on my table. "What are those?" he said. "Those are the homes of some of our men and those are their gardens." Another photograph showed that same piece of ground three years before. I said to him "Do you see that piece of ground there? Three years ago that was nothing but a dumping ground covered with litter and tin cans and the like." "What are you going to do with the pictures," he asked. I told him that I was going to have one of them printed in one of our pamphlets. "Why don't you print both of them, to show before and after treatment," he said. I replied "That is exactly what I do not propose to do. Because to do so would spoil all the good I am trying to accomplish. If I printed both pictures, I could have only one apparent purpose in view and that would be to exploit what I am doing. To print the ugly picture is the last thing

I would dare to do. As for myself, I am perfectly satisfied with what I am doing, and if I am entitled to any credit, that credit will come in the course of time. I am not anxious to hurry the horse at all. I want that man who owns that house or who lives in it, to get a copy of that picture for his own, for by his hands he made it what it is. I want him to feel proud of his work and to feel that we have appreciated it."

I merely mentioned that incident as an illustration of the injury which might have been caused. The precious jewel of every man's soul must be preserved. And again, there must be nothing that indicates we are giving him something. In the first place we have no right to do that. The American Iron and Steel Institute has no moral right to spend one dollar for charity, The money does not belong to us. I might hand a dollar to every man I pass if it is my dollar, but I have no right to take your dollar and hand it over to charity. There is no charity in it. Our whole purpose is to promote the welfare, not only of the men who work but the men who employ them.

With that outline, that you may know how I stand, I will take up my theme.

In the spiritual world motives count for everything. In the Great Book that contains the record of our lives, it is good to know that we will be judged by what we tried to do, rather than by what we did. However short we may fall, we will be judged by what we tried to do. On the other hand, it is just as important to realize that in the material world motives count for absolutely nothing. "He meant well, he is a well meaning man; he is a good man;"—those are the things they say, but they do not justify us in following his leadership. He may be a very good man, yet a very helpless man.

In order that real good many be done, there must first be the desire to do a good deed, and that desire must be accomplished by wisdom if you are going to accomplish that good.

A female elephant was walking through the jungle and inadvertently she put her foot on a mother bird that was trying to guard her nest of young ones. The elephant seeing what she had done was greatly disturbed and her heart was troubled. Addressing the helpless little birds, the elephant said; "I did not mean to kill your mother. That is the last thing I would think of doing. Now I know that when she was limping along in front of me, she was only trying to lead me away from you, and now I have killed her. What shall I do? Well since I killed your mother, I guess it is up to me to take her place in the family, and do as she would have done," and the

elephant sat down upon the nest. The motive there was admirable, but the result was disastrous. Good was intended, but harm came from the very attempt. And remember, it is the easiest thing in the world to emulate the elephant.

The idea of accident prevention is not new by any means. But in a large sense it was born with this century. Prior to this century, the operator felt that he was obliged to get as much as possible out of his men and get them at as low a wage as possible, to the end that his returns might be as large as possible. The employer felt he had no responsibility for his men. However, we have taken a new step upward in this twentieth century. That is, that the employers now have a measure of responsibility for their employes because they found it was to their mutual interest to have it so; and it was especially material because their business had become large enough to make it so. The working conditions with a small company with small capital are not always what the men would like to have them to be. The employer himself has no fixed hours, or no fixed duties. Anyway to get the work out is all right with him; but, as his business grows in size, he can better appreciate the value of system. You know if you are on a farm, you have to do whatever the employer does and a little bit more, unless it is on a farm large enough to have the work divided into departments, thereby enabling the men to have reasonable hours of employment. I remember when I was on the farm. It was not the day's work that bothered me. It was the chores after the day's work had been done in the field. On the large farm there can be someone to look after the chores, so that when the farm hand's work is accomplished, his day's work is at an end.

Big business is comparatively a recent thing. Big business has made it possible for specialists to take up this particular work of accident prevention and devote their full time to it. The iron and steel business is a hazardous business, and all we poor human beings can do is to do the best we can.

There are two sets of people who are interested more than anyone else in the solving of the problem of accident prevention,—the employers and the employes. As Mr. Close said awhile ago, it has reached the point where it seems that safety devices have about reached their limit, and that the duty now rests with the men themselves. Now there are two conditions that must be met in both cases. One is that they must be able to co-operate. The second is they must have the desire to co-operate. The ability to co-operate relates to the condition of the men and may have to do with things entirely outside of the plant itself. Suppose, for instance, that a man lives in an uncomfortable home, and he comes to work in the morning tired

or worried over conditions at home. No one needs to be told that a man cannot do good work or exercise proper caution when he is in that condition. So that the employer, so far as he can do so,—and the Institute does do it without encroaching upon the self-respect of the man,—should encourage the men to make their homes good places to live.

Those companies which can control the matter, should help to build comfortable homes and surround their employes with spaces for gardens, and encourage the making of those gardens by rewards of various kinds.

The seven day week was a big stumbling block in the small industries for several years. All men should have one day of rest in a week, preferably the Sabbath day. But certain places must go on a seven day basis because the operation of their plant must be continuous. I am glad to say, however, that within the last few years that problem has been practically solved. In justice, it may be said that the seven day week for workers has been practically eliminated in the iron and steel business by the adding of another and substitute crew. The substitute crew works for one set on Monday, another on Tuesday and so on through the week. Not all can have the seventh day for rest, but all can have one day in seven for rest and recreation. It would be more desirable, of course, if all could rest on the Sabbath day, but the method I have just outlined is about the best I have been able to find so far.

There are certain businesses which require certain hours of labor. There is a feeling that fatigue is one of the causes for accidents. The importance of that theory has been overestimated, as a careful study of the facts will show. If that was the case, accidents would increase in an upward curve from the beginning of the day's work until noon. Then down again during the first hour or so of the afternoon's work and then up again until the close of the day. As a matter of fact that is exactly what does not happen. The safest hour is at the beginning of the day. The next safest hour is just before noon. Beginning at one o'clock, the safest hour is from one to two o'clock. The most dangerous is from three to four. The second least dangerous is at the closing hour of the day's work. There is no particular reason why this is so; however, I just wanted to tell you that this is the case and it is proven by the statements of the industries. You have overestimated the importance of that theory. If, on the other hand, you have assumed that men get more watchful as the day passed that is not so. The first condition of safety is that the employers themselves should surround the men by the proper conditions as far as possible. First by accident prevention devices,

Second, by making the conditions of work as humane as possible. For instance, have a good supply of drinking water of easy access to the working places of the men. In one concern I have in mind there was spent a lot of money to secure an abundant supply of good drinking water, but in the summer it was too warm to drink, and therefore the men did not drink enough. In order to remedy that, the employer put ice in the water. The result was that the men were subjected to cramps and out of employment for a period of time by reason thereof. They spent \$143,000 in installing a distributing plant to carry the water to all points of the plant in such a manner that the temperature of the water from the time it left the point of distribution until it returned, varied only 5 degrees. It was 48 when it went out from the distributing point and it was 53 degrees when it came back. The result was there was not a single case of cramps among the men since that was done. That was not charity. We do not speak of it as such. We don't feel that way either. We are doing something for the men and we don't want them to feel that way either. We are doing it for ourselves and our employes. Our interest and theirs are mutual. The whole hearted co-operation of the men must be secured. Without that all else falls to the ground. You may think to do everything else, but without that co-operation it will fail. I can well understand how strong men, men who were accustomed to making iron, look upon the question of accident prevention that "It is childish to talk to us about that. I am used to facing danger and hard work." He has the spirit of a soldier, and I can imagine him saying "What do I care about their new fangled notions. I am not going to stand for it;" and very likely he begins to wonder "what the boss is up to anyway. He has some scheme back of this I'll bet." But, as my mother used to say "The best of proof is time." For a time that employe may be antagonistic, but do your utmost to be right and don't worry. Of course you will make mistakes but do your utmost to be right and let no one humiliate you if you are right. Soon then a foundation is laid and the men are gradually understanding, and the burden becomes lighter.

We never make professions of friendship. There are too many of that sort. That is their stock in trade. How easy in public life is it for a man to go along shouting for some fool thing if it seemed to be vox populi. Too many men want to be the savior of their country. And after all, if it is found that the thing which this man thought was the voice of the people and which he accordingly advocated so strongly is really not taking so well and that there is a suspicion that the people are going to go the other way, he simply argues with himself that "People will be progressive, and if people change their minds, I am going to keep in front," and when they do

change, sheer momentum will carry them further, so he starts a little ahead of them and when the wave starts to gather and roll the other way, he manages to keep ahead of it and in that way keeps ahead. That is one way of forcing in among the common people. The other man looking at the same picture says "Your standing in this matter is wrong. That decision of yours is not new; it has been tried in this world of yours scores of times. It looks plausible, but it has never yet failed to end in disaster. By the eternal, I am going to show them what the right is. I know where that thing you advocate leads to inevitably. I am going to reason it out with the people. I have that much confidence in the sense of the common people that I believe they will listen. I believe I am right and I am going to stand up and take the verdict, whatever it is, win or lose, but I believe I will win.

"I will not knowingly betray the confidence of those people who have trusted me.

"I will not allow myself to be lifted on their shoulders as a hero, when I know I am betraying their confidence."

Which of those two men has the faith of the common people? One will be tempted to belong to the first class. We have the applause of our fellows when we join the first class, and it takes a whole lot of faith to belong to the latter class,—to the class that is capable of going beneath the surface and finding out the real truth and telling it to the people whether it is popular at the time or not.

My experience is that the average fellow is possessed of both intelligence and integrity. In his soul he means to be right, and when he knows what that is, he will want to follow it.

As I said before, it was hard to get the men to co-operate. They simply had to be overcome by time. At first, as Mr. Close has indicated, committees composed of the supervising officers were created, but it was found that it was necessary to get nearer the men, so committees composed of the foremen were created and, below them, committees of the men themselves were made for the purpose of offering suggestions. The suggestions that came from the men were not always good. Sometimes they were very good, and when the men had served on those committees and had seen the employers' attitude, gradually there came a feeling of confidence and good will.

Resentment, enmity and unfair competition has been left behind. The word from now on is co-operation. Co-operation between employers and employees will spell safety.

DISCUSSION.

B. F. LARUE, of the Lehigh Valley Railroad spoke as follows:

While listening to the speakers who have preceded me, and the report of the Governor telling of the large number of accidents that have happened in January and February of this year, I could not but think that Pennsylvania has been justly called the greatest industrial State. All the anthracite coal of the United States is mined within the confines of this Commonwealth. The steel companies of the State produce millions and millions of tons of steel. The production of this vast amount of steel and coal causes an immense amount of traffic on the railroads and a congestion of freight. And from this alone you have all the elements that tend to create a large number of accidents on the railroads. The accidents are sure to occur when there is a congestion of freight, as well as when you mine the millions of tons of coal and produce the millions of tons of steel.

When the "safety first" movement swept over the country a few years ago, the Lehigh Valley Coal and Navigation Company took up the movement. They created the general safety committee, the division committees and finally they organized a committee to include all the men and asked for their suggestions to improve their working conditions. To retain the interest of the men, prizes were offered. The employe in each division who furnished the best suggestion of the year was presented with a gold enameled badge. He was also given a month's vacation with pay. If that man went through the year without receiving discipline marks or "black marks," he was entitled to a clear record button, and also, as long as he retained that clear record, his wife was given an annual pass. If he had been in the service five years, he got a division pass for himself and his wife, and if he had been in the service ten years he was granted an annual system pass for himself and wife as long as he retained his honor button. The Safety Committees held meetings every two weeks and received suggestions. The suggestions were all considered and where they were practical were adopted. If there were any special features about the suggestion, they were handed to investigators to take them up upon the monthly inspections which were made by these division safety committees.

In the last three years, there have been suggested to the safety committee some 4,885 suggestions; 3,551 have been adopted; 174 pending; 600 have been discarded and 560 were considered unnecessary.

While the railroads have spent thousands of dollars upon preventive measures and improving conditions along their railroads, the State has passed no legislation at all to prevent a great many of the serious accidents happening on its railroads and rights of way. Mr. Loree

spoke to you about the number of trespassers who were killed. In the year 1914 a compilation was made of the number of trespass cases happening on the railroads of this country. There were investigated 4,746 death cases; loss of one limb 826, loss of both limbs 172 and 5,041 other injuries, making the sum of 10,785 persons who were killed or injured by reason of the fact that they were trespassing upon the rights of way of the railroads. These accidents occurred as follows: 3,400 in country districts; 3,482 in cities and 3,882 in towns or villages. It was found that but 175 of these trespassers who were killed or injured were professional tramps,—the balance being mostly factory employes who were using the right of way as a short cut from their homes to their work. But 5% of those killed were children; 15% were between the ages of 15 and 21; 32% were between 21 and 30; 29% between the ages of 30 and 50, showing that the trespassers killed, totalling about 5,000 annually, were not tramps or hoboos, but were workers and men of value to their country. The Interstate Commerce Commission has reported approximately 11,000 trespassers killed and injured on railroads of this country each year for the last five years.

The railroads have followed very carefully the laws passed by the Federal Government providing for the safety of patrons of the railroads and the betterment of the service, and in the State of Pennsylvania they have abided absolutely with its laws providing for the safeguarding of travelers, as well as the rules and decisions of your Public Service Commission. Notwithstanding all the precautionary measures that have been taken and the thousands of dollars that have been spent by the railroads for the promotion of safety, the State of Pennsylvania still stands guilty of gross negligence for not enacting proper laws to prevent trespassing upon the rights of way of the railroad companies.

APPOINTMENT OF COMMITTEES.

Dr. Jackson announced the following persons to act with the Department of Labor and Industry as a general advisory committee of employers:

Steel Industry

Quincy Bent, ... Pennsylvania Steel Company.
 C. W. Heppenstall, ... Heppenstall Forge & Knife Co.
 Wm. B. Dixon, ... Midvale Steel Company.

Coal Industry

Robert A. Quin, ... Susquehanna Coal Co.
 John B. Kerr, ... Pres. Scranton Coal Co.
 H. A. Taylor, ... Pittsburgh Coal Company.

General Industries

Paul Thompson, ...	United Gas Improvement Co.
W. F. Lowry, ...	American Car & Foundry Co.
Herbert Lloyd, ...	Electric Storage Battery Co.
John Bailey, ...	Bell Telephone Company.
H. S. Wardner, ...	New Jersey Zinc Co.

Railroads

L. F. Loree, ...	Delaware & Hudson Co.
W. H. Truesdale, ...	D. L. & W. R. R. Co.
C. H. Ewing, ...	Philadelphia & Reading Rwy. Co.

ADDRESS BY WILLIAM C. WILSON, CLAIMS ATTORNEY
FOR THE DELAWARE, LACKAWANNA AND WESTERN
RAILROAD COMPANY, ON RAILROAD ACCIDENTS AND
THEIR PREVENTION.

Mr. Chairman, Ladies and Gentlemen: I am glad to note that there are some ladies present. In our own work we try to appeal to the homes and get the wives of our employes interested in this proposition of safety. I wish that there were more present today. It was said by the first speaker of the afternoon that the problems in the steel industry involved two elements, the employer and the employe. The railroad proposition involves these two and one more. This is the public. It does not make so very much difference to the man on the street as to what is going on inside of the factory and as to whether the conditions there are as they should be, but we cannot assume that same attitude towards the operation of the railroads because he is brought into direct and personal contact with the operation of the railroads. There is, therefore, involved in the prevention of accidents as to railroads another very important element. Mr. Larue has stated in general what the attitude of the railroads has been with reference to the prevention of accidents and I will only go over the ground in a general way in order to impress still further the activities of the railroads in this respect. I think it was in 1910 that the first organization was started on one of the railroads in this country and now practically all of the railroads have some form of safety organization. The form of organization usually followed is that of a central safety committee and division safety committees composed of the division officers and a representative from each branch of the service. The division committees meet once a month and their sessions are most

interesting, sometimes lasting three hours or more. They discuss all questions connected with safety and the prevention of accidents, and all conditions, both the physical conditions on the division and the unsafe practices of the men. There has been on our railroad (The Lackawanna) since the beginning of 1912, 5,106 items passed upon by the division safety committees and of this number 4,759 have been corrected. In other words, 93% of the safety items reported and considered by the division safety committees, composed of employes and officers, have been corrected. We think this is a very proud record and it shows better than anything else the hearty co-operation between the management and the employes in securing safety conditions. As a result of our safety work, and I speak of this because it comes within my own knowledge, our fatalities have been reduced in comparison with 1911, the year before we organized the safety movement, 60% and our nonfatal accidents have been reduced over 20 per cent. We secure this co-operation through the division committees, and through large rallies of our men in large halls or theatres where they discuss safety problems. These discussions are carried on almost exclusively by the men. The presiding officer and all of the speakers have been from the ranks of the employes.

You cannot secure safety through legislation. We have had legislation ever since railroads and industries were organized in this country and yet the toll of life and limb was not reduced, but rather was on the increase. It has only been since this campaign for accident prevention put into operation by the employers of labor, with the co-operation of the employes themselves, that actual results have been secured. All over this country where safety standards have been adopted you will find that the records show a reduction of industrial accidents. Now, how has this been secured? It has been secured because we have found that accidents cannot be materially reduced except by co-operation of the employes and that such co-operation must be secured through education. The matter must be brought home to them. They must be made to understand that this is a duty to themselves and to their families. They must see wherein they have been wrong and wherein we have been wrong. They must study the problems even as the officers study the problems. It is absolutely true that many of the best suggestions that have been received by our committees have come from the rank and file of the employes. We secured this education not only through these meetings but by literature which is spread broadcast among our employes. As has been said, in the first instance, they were a little bit skeptical of the real meaning of the safety movement, but as time went on and they found that the officers of the company and the management were in earnest on this subject and that it was in the interest of all, they were glad

indeed to co-operate. These five thousand items that were corrected cost the company money, but they have been willing to back up any practical suggestions in safety and this has shown, among other things, that they are in earnest.

Now, if the problem as to railroads was confined to our employes we would feel very much encouraged and that we were making progress. However, we have other questions and problems. I want to read, with your permission, some remarks made by Mr. Dow, of the New York Central, at the Fourth Annual Safety Conference in Philadelphia in October, 1915.

“For years there has been a nation-wide agitation in behalf of greater safeguards for employes of railroads, other industries and the general public. In every state there has been a veritable epidemic of legislation with a view of protecting the working man from possible injury. Safety devices of every description have been installed, rules formulated, regulations adopted and mechanical safeguards invented and applied until it would seem that accidents never could happen. But, the disquieting feature of the situation has been that up to a year ago, in spite of these extraordinary precautions taken to insure immunity from harm, accidents resulting in injuries increased steadily and the very laws that were made to lessen accidents actually seemed to foster them. It remained for the officials of the railroads and other great industries to discover where the real trouble lay. The conclusion was reached that, with all the laws which might be passed and safety devices which might be installed, there would be no successful reduction in accidents until there had been enlisted the co-operation of those persons in whose interest such precautions were being taken. In other words, it was found that the human element was upsetting all the carefully laid plans of well-meaning legislators and, it was with this fact in mind, that within recent years, this so-called ‘Safety Movement’ was started.

“A study of the accident records of individual railroads as well as a careful analysis of Interstate Commerce Commission records shows very conclusively that at least 90 per cent of all injuries to employes are caused by the fault of either the injured man or some other employe. The Human Element! It can never be effaced by all the laws that can ever be passed and enforced. The one great powerful factor which will curtail and reduce and which is already curtailing and reducing accidents on railroads and in other industries is co-operation between employer and employes to find the most effective means of increasing the thoughtfulness of the employes, to teach them to think and avoid practices which may result in injury to themselves and others. It is this spirit of co-operation which will

prevent more accidents than all the laws that ever were passed or ever will be passed intended to regulate the safety of modern transportation. All the laws that can possibly be written in all the statute books of the world would not prevent injury to the employe who steps in between moving cars to adjust a coupler and who, while in that perilous position, stumbles and falls under the wheels, to be dragged forth a helpless cripple, to be for all his days, if he lives, a burden to himself and society; a poor unfortunate wreck of a human being, racked by pain and soured by the bitterness of his lot, and all because he did not think, or did not take the time to stop those cars before he went in between them. It is because the accident records conclusively show that the majority of injuries are caused by acts of carelessness similar to this that the railroads have launched their safety campaigns."

But what has the public done in reducing casualties on the railroads? Practically nothing. Seventy-two per cent of the fatalities charged against the railroads for the year ended June 23, 1915, were neither employes nor passengers; they were outsiders, representing the general public. Twelve times as many people were killed in highway crossing accidents as were killed in train accidents. Nearly three times as many trespassers were killed as employes, and this includes the whole body of railroad employes of all classes.

According to the report there were 265 passengers killed on American railroads for the year ending last June. Only eighty-five were killed in train accidents. What happened to the other 180? Forty-eight were killed by falling from cars, sixty-nine while getting on or off cars, forty-seven by being struck or run over at stations or in yards, and sixteen from miscellaneous causes. These accidents happened to people who were boarding or alighting from cars. They were also caused by passengers standing on car platforms while the train was in motion and especially by passengers standing on cars steps long before the train had reached their station so that the moment it stops, indeed usually before it stops, they could jump and run for home or office.

Now, trespassing in this country is a national disgrace. Over five thousand people were killed in 1914 while trespassing on railroad property and over six thousand were injured. The railroads cannot possibly prevent this condition by their own means. They must get the co-operation of the public. They must get the co-operation of the courts; they must get in this respect the co-operation of the Legislature for while it is true that as between employer and employe legislation does not seem to do very much good, yet on this proposition as representing the unenlightened customs of the people there should be stringent laws passed against trespassing. It falls in the line

of my duty to be brought in contact with the personal injuries of trespassers. Not long ago I saw one little boy of fourteen years of age with his leg off. He had been hopping on the cars. Another boy had his arm cut off; another boy had lost three of his fingers. There must be a campaign in our public schools, in the press, and in our homes against such practices. It makes one's heart bleed when brought in personal contact with some of these terrible cases of boys and girls who are maimed for life, with the chances for earning a livelihood very much reduced if not entirely cut off. In this State there is no law upon the subject. In States where there are laws, the magistrates, as a rule, do not try to enforce them and I can well understand that because usually the public's conscience is not aroused and the officials do not feel that they are in position perhaps to mete out such punishment as in many cases is deserved. This applies not so much to the children but to men and women who continually trespass on railroad tracks.

To try to meet the situation in the past we have circularized every industry along the line. I am speaking of the Lackawanna to illustrate what is being done by many railroads. There is no industry along the line from New York to Buffalo that has not been circularized and in which posters have not been placed. We have secured the hearty co-operation of these industries in endeavoring to stop employes from trespassing upon the railroad tracks. The result is very apparent to us. Since we have circularized and placed posters in these institutions and also placed a little insert in the pay envelope we have had only one employe of an industry killed, and nobody seriously injured on account of trespassing. That shows what practical work will do. This prevention of accidents proposition has progressed to the point beyond mere talk. The employes, generally, have gotten far beyond speeches. We are down to the vernacular brass tacks. We are trying to get down to scientific investigation and analysis of the causes of accidents. But one trouble with the American people is that they are faddists. We get a good idea and run it to death. It is: "Hurrah boys, everybody get on the band-wagon." There is enthusiasm for a time. It then simmers down. We try to do in six months what it has taken Germany twenty-five years to do. By persistent work, Germany has secured an immunity from industrial and railroad accidents which is not possible in this country today. However, we are striving toward it and anything that helps will be very thankfully and gratefully received. With the co-operation of the public and the railroads I believe we can reduce the number of trespass accidents to a minimum.

The other great class of accidents occurs at highway crossings. Many roads are eliminating highway crossings as fast as they can. It requires time and the expenditure of immense sums of money. We have in the State of Pennsylvania an unbroken stretch of over fifty miles of road without any grade crossings. We have another stretch of road approximately thirty miles in length in which there are no grade crossings. The railroad companies are spending immense sums of money every year in the elimination of grade crossings. That does not solve the question and neither does that remove from you the duty of trying to solve this problem. Do you know the records show that there were more accidents last year from automobiles running into and through safety gates than happened from all the other causes combined involving automobiles at grade crossings. When the indignant but inconsistent automobilist finds that his shield is broken or something else is wrong by reason of striking the gates, he immediately bills the railroad company for the repairs and we usually bill him back for the gate which he has damaged.

Some automobilists approach grade crossings at such a speed that they cannot stop. We are trying, through the automobile clubs, manufacturers of automobiles, and otherwise to minimize this evil. It is important because it presents a danger not only to the man in the automobile but to the man who is riding in passenger trains. We had not long ago a case where a passenger train was derailed by striking an automobile. This automobilist, as he saw the gates coming down thought he could shoot through ahead of the train. He succeeded in getting under the gate and was struck by the train which was derailed and the chauffeur of the automobile killed. The public should stand against that sort of thing. It is a danger to the traveling public as well as to those on the highway.

There are many phases of the railroad safety problem which might well be discussed on an occasion of this kind, but you have heard a great deal about it today and I will not take up any more of your time. I think it is a good augury for the future that the Governor of this State and the State officials are aroused upon this question of accident prevention. I think that a meeting of this kind for the consideration of these important questions shows that the public is aroused and that public officials realize their own duty and responsibility in trying to co-operate with the employers of labor and with the railroads in reducing the number of accidents. They can do this if they will approach the problems from a practical standpoint. If they will do this, I think splendid results will be secured, but nothing can be obtained through diversity of effort. It must be done by the good will and by a good conscience that will lead men to sit down together and consider these things in a helpful spirit. We will then, I am very sure, see a brighter day in the cause of accident prevention

Discussion.

In the general discussion that followed, W. H. TRUESDALE, president of the D., L. & W. R. R. Company, spoke as follows:

"I feel that Mr. Wilson, our Claim Attorney, has covered the case so far as I could see, and I could not add anything to what he has already said.

"I have been very deeply interested for some years in this question of guarding the lives of men engaged in dangerous employment. Our Company, back in 1911, started the safety first movement, and carried it on, as Mr. Wilson has outlined, with very excellent results. We met with some discouragements from time to time, especially when we saw the veteran class of men, as we call them, by reason of their long experience, men, who, with their experience should be the most careful themselves and with their comrades, do the most remarkable things and with awful results. We have had several cases within the last few months that have impressed me a great deal. I might say that one of them was the case of an engineer on one of our fast trains $3\frac{1}{2}$ hours out of Elmira, en route to Buffalo. He was driving one of our new engines, one of the latest models of superheaters, with the water pipes in the fire box. One of the pipes broke and the rush of steam and hot water scalded the engineer and fireman, and after lingering a few days both died. Investigation showed that the engine was equipped with a safety appliance to prevent such an accident. This was an appliance which causes the fire box door to close automatically by air pressure. Either the engineer or the fireman, I think both were responsible, had disconnected the air plunger by which the door was operated and the door was blown open. If that had not been done they would not have been injured at all. It was a safety appliance put on to prevent just such an accident.

"Another case: An engineer of considerable experience, about two hours out of Scranton, was sent in on a passing track so that another engine might go in ahead and run double-header. The engineer ran his train at about the full speed he was running in on the passing track and out through the switch, overturning his engine and killing both himself and fireman. These men had their rest and were only two hours out when it happened.

"In Hoboken, New Jersey, two engineers, after coming in from their runs one evening in perfect safety, took the short cut up the railroad tracks toward their homes and a switching engine got them. One lost his life and the other was badly injured. I cite these in-

stand to show how difficult it seems to be to impress upon the best of men in the railroad service the need of being careful, and how frequently accidents resulting in injury or death come from just that sort of carelessness.

"Our men worked the safety movement in the transportation department, as outlined, fairly successfully. Then the suggestion was made that we organize another committee in our mining department. That was more difficult on account of the large number of foreigners employed in the mines, and we had to find some way of reaching them. Among other things, we had a book, and by the way, Dr. Jackson, I will give you a copy of it, in which were numerous illustrations showing how accidents occur, those most serious, such as fall of coal, powder explosions and the like. The book is filled full of pictures showing how the work should be done and how it was too often done with fatal results. Accompanying each picture is a sort of catechism, propounding questions, which are answered. We also include some little work in connection with trying to encourage the foreigner to acquaint himself with the English language and become an American citizen. This we circulate quite freely among our men. Occasionally we entertain them with a motion picture show something similar to the one we saw this afternoon.

"We are all deeply interested in this work, and it is a pleasure for me to be here today and hear the matter discussed and learn the views of the various men who have gone into the question and are likewise deeply interested in it and who are doing what they can to improve the existing conditions.

"You may rely in the future upon the people who have the responsibility of the management of the railroads in the State of Pennsylvania, and likewise those who have the mining interests at heart, particularly the anthracite,—they are doing everything they can to promote the great work, and you will find their men always ready and most responsive to receive suggestions how to work in these industries with better results."

* * * * *

JAMES H. MAURER, President of the Pennsylvania Federation of Labor said:

"Mr. Chairman, Ladies and Gentlemen:

"I really did not expect to be called upon to have anything to do. I understood that Mr. Gompers was to represent the workers' side today, and if I tried, I could do nothing more than endorse what he has already said. I do heartily endorse what President Gompers, said, and feel I could say little more. I might mention, however, that I am heartily in favor of and in sympathy with the efforts of

the Department of Labor and Industry and the Governor of Pennsylvania in reducing the number of accidents, and personally I have been much concerned and interested in the subject for the greater part of my life. I intend to do all I can in my own way, among those with whom I may have some influence, and I hope it may have some effect toward the minimizing of accidents and the death rate. I believe that is true of all who are present here today. However, I believe we ought to get together oftener. I believe a resolution will be presented this afternoon providing for an annual conference of this kind. My experience with this conference has been that it has been too short. These conferences should be extended to a week, and I am satisfied we would have plenty of work if we stayed a week. True, some of us would find it very difficult to get away from work for a week, and that is unfortunate and to be regretted. But in view of the fact that there is so much to do of great importance, and since we can't gather every year for a week, we might gather more often, if only for a day at a time. I am satisfied that the resolutions which will be presented by the committee will be adopted, and if the spirit of the resolutions is carried out, it will work wonders before the next conference in 1917 and many reports will come to that conference that will be encouraging to everybody. I wish also briefly to emphasize what President Gompers has said concerning the need of shorter hours of employment. You all understand my position,—that I am very close to the workers and have been all my life. I find many men so exhausted at the end of their day's work that they are just about 'all in.' Some of them do not possess enough vitality to enjoy their evening meal.

"I will never forget an experience which I had a few years ago with Judge Bland, of my city. The Judge at one time lived close to a large industrial plant and could see the men coming home from their work in the evening. Then the company moved the plant away some two miles from his home and time passed and the Judge did not see the men coming from their work. One day he and I were walking out Sixth street in the direction of the plant that had formerly been located near the Judge's home. As we neared the plant, we met some of the men coming home from work. The Judge looked at them and turning to me said: 'What is the matter with those men. Look at them.' 'Oh,' I said, 'They are tired and dirty, that's all.' 'But,' he said: 'Look at their countenances. They don't look human. They don't look like the men I used to see when the plant was close to my home.' And they were different men. Those men had been used up to the very limit of their endurance. Every second must count with them. The speed demanded in many industries today is something terrific, and I fear gentlemen we have reached the limit. I have gone into mining centers and there found men forty years of age all bent up

with rheumatism and their joints stiff. That trouble was traceable to conditions under which no human being should work,—the men had worked in water for days and weeks. These things are not true of all mining employment, but are true of some. Those men are liable to be hurt. They are not active. They are numb. Mentally they are dead, not having time for pleasureable recreation. The industries get all out of them there is and there is nothing left for anything else, and they go to bed. I don't tell you this in a spirit of hostility, and I hope you won't accept it in that way. I merely tell you this because it is true, and those are the things we must consider if we are going to improve conditions and reduce accidents. I feel hopeful about it. I am not a pessimist, but an optimist. This gathering is indeed encouraging and we should have more of them. I also wish to say that we are in sympathy with the attitude of Governor Brumbaugh. Years ago when I came to Harrisburg to present conditions from our side of the case, I was postively insulted, and I tell you it was humiliating; so much so that I did not care to come back anymore, and finally I refrained from coming at all until my constituents sent me here. I can tell you there is a big change here,—a change for the better, and we owe much to all those who are responsible for this change.

"I thank you, Dr. Jackson for calling on me, and I thank you all for your good attention."

RESOLUTIONS PRESENTED AND ADOPTED.

LEW R. PALMER, Chairman of the Resolutions Committee, reported the action of the Committee, as follows:

RESOLUTIONS:

Whereas, the number of accidents occurring to employes in the industries of Pennsylvania and of the United States, is so appalling that the Commissioner of Labor and Industry estimates there will probably be 2,500 employes fatally injured and 300,000 employes more or less seriously injured during the present year, in this State, and based on this estimate, there will probably be over 25,000 employes killed, and over 3,000,000 employes otherwise injured, throughout the country during the same period, and,

Whereas, each accident represents not only loss to the injured employe in wages and suffering, but also a direct financial loss to the employer in that a new man must be instructed to take his place, and usually compensation or damages must be paid, and it has been estimated, that on the above basis, accidents will cost the employers of Pennsylvania upwards of \$15,000,000 during 1916, and,

Whereas, this tremendous loss to both employer and employe can be very materially reduced, as is shown by the records of a great number of companies in various lines of industry, and since twenty-two large manufacturing companies of the country showed an average reduction of 58.6% for their accidents, these reductions varying from a minimum of 24% to a maximum of 80%, and ten of the leading railroad companies of the country showed an average reduction of 40.4% in their accidents, with a minimum of 18% and a maximum of 80%, and,

Whereas, an important example of accident reduction throughout the country, is shown in the "Safe and Sane" Fourth of July movement, which has practically eliminated the tremendous number of fatal and other serious accidents, and to a large extent, the fires which, in the past have accompanied the celebration of this national holiday, and,

Whereas, a corresponding result has been accomplished through persistent efforts by the railroads of the country, in reducing the number of accidents to passengers, so that on many systems a fatal injury to a passenger has become almost unknown, and,

Whereas, these results are obtained through the persistent and continued efforts of the executives and their employes, to place their establishments in a safe condition, and to instruct by bulletins, talks, motion pictures and otherwise, all of their employes in the dangers and hazards of their work, not only calling attention to the dangerous methods, but also showing and insisting upon the safe method of working, and,

Whereas, this safeguarding and safety education can only be accomplished by means of an organization devoting its entire time and best efforts, to this work and further, that there is in all cases, a direct reduction of 12% in the compensation premiums payable to the insurance carriers for every manufacturing establishment installing a safety organization, and,

Whereas, it is being continually demonstrated that an effective safety organization effects a marked and gratifying reduction of accidents in plants of all sizes and in all lines of industry, therefore,

BE IT RESOLVED: That recognizing the importance of making a determined effort to reduce the number of accidents occurring in this State, and recognizing that such a reduction can most effectively be accomplished by the education of all officers and other employes in safe methods and further recognizing that such education can best be accomplished by organizing for safety, we the representatives of

employers and employes of Pennsylvania, pledge ourselves to aid in the establishment of safety organizations in the plants with which we are connected, and to exert our best efforts to insure their introduction into other plants of the State, and,

Be it further resolved, That we strongly recommend to every employer for his own profit, the good of his workmen, and the conservation of human life, that he exert every effort to reduce to a minimum, the accidents occurring in his plant, and, to this end, install a safety organization, which shall be headed by the chief executive of the company and shall include representatives of the employer and the employes, to make a study of accidents and accident prevention and endeavor in every way to educate the officials and workmen of his plant, as to the safe and proper methods of performing their duties, and that in order to co-operate fully with the State Government, each establishment, which has completed a safety organization, designate one man to represent them in their dealings with the Governmental Agencies, and,

Be it further resolved, That every employe in this Commonwealth be urged heartily to co-operate with every reasonable effort of his employer to prevent accidents in the industry in which he is employed, and, to assist further in increasing the co-operation between the employer and the employe, be it resolved that representatives of employes and representatives of employers be urged to attend the annual Pennsylvania Safety Conference and thus perpetuate the object of this Conference.

Be it further resolved, That we extend our thanks to Governor Brumbaugh and the officials of his Government for requesting this co-operative action on our part and for the offer of co-operation on their part, and that we heartily accept this offer of co-operation and recommend that all establishments of the State do likewise.

James H. Maurer, Penna. Federation of Labor.

Homer D. Williams, Carnegie Steel Company.

C. C. Boner, United Mine Workers of America.

Herbert Lloyd, Electric Storage Battery Company.

Stephen McDonald, Scranton Central Labor Union.

R. S. Hubbard, Harrison Brothers & Company, Inc.

William Young, Philadelphia Typographical Union No. 2.

H. C. Esling, J. G. Brill Company.

Lew R. Palmer, Chairman, Department of Labor and Industry.

It was moved and seconded that the resolutions be adopted as read.

Mr. L. F. Loree moved that the following be incorporated in the resolution:

"Whereas, the number of trespassers killed on the rights of ways of railroads in the State is more than double the number of passengers and employes killed.

"Therefore, be it resolved, That the attention of the Governor of Pennsylvania be called to the condition and that he be requested to urge upon the next Legislature the passage of suitable legislation to prohibit trespassing upon the railroads, with suitable penalties for the violation thereof."

The motion was seconded by H. S. Lydick, of the Pittsburgh Coal Company.

Considerable discussion followed this action and evoked the following comment from Commissioner Jackson, the presiding officer:

"The Department of Labor and Industry does not have any jurisdiction on the subject of trespassing. The whole matter is for the Public Service Commission. This convention was called for the primary purpose of talking 'safety first.' The Governor called the conference and the burden of handling it was placed on the Department of Labor and Industry. Therefore, something coming up entirely foreign to us places me in a rather delicate position. Some of those present insist upon a vote, which might prevent us from going on in the future. I firmly believe that the State of Pennsylvania should take action. The awful loss of life on railroad property or anywhere else should not go on; so I have an opinion on this matter which is opposite to the opinion of some of those of the men who have spoken against this resolution."

It was then moved by Stephen McDonald as an amendment that action be deferred on this resolution, and that it be referred to the Conference which will be held in Harrisburg next November, known as the "Safety First Conference."

The vote was then taken on Mr. McDonald's amendment resulting as follows: Ayes 20, Nays 18.

REMARKS BY SAMUEL GOMPERS.

Samuel W. Gompers, prior to leaving the conference for the day made the following remarks:

"I crave the indulgence of the conference for a few moments. There are three subjects which I wish to mention and I won't take three minutes, as I have to leave very soon. One thing I want to say is, that I was very much impressed with the picture show, and I desire to express not only my appreciation but also the thought that no one can see those pictures shown without their leaving a very indelible impression upon his mind. The second thought I want to express is, that with every one of you gentlemen, I have been very much interested in the masterly address of Professor McCleary. I noted that during his remarks he made the statement that he had authentic statistics to prove that the largest number of accidents occurring in the forenoon happened between 10 and 11 o'clock and that they diminished from 11 to 12, and that the same thing took place in the afternoon. Now that was his statement, which you no doubt noted was in conflict with what I said. I only desire to say that the information I had was from data gathered by the New York Compensation Bureau, and was to the effect that in the last hour of the morning's work and in the last hour of the afternoon's work the number of accidents was greater than at any other time during the day. I intended to make mention of this in the presence of Professor McCleary, but did not care to interrupt him while he had the floor and after he finished he left the room before I had an opportunity. Third, the Committee on Resolutions has not considered a subject which has come to me this afternoon and without the opportunity of my suggesting it to them, and that is the idea of urging the creation of a Bureau of Safety under the direction of the Commissioner of Labor and Industry of the State of Pennsylvania, for the purpose of demonstrating all safety devices in industries, transportation and commerce of the State, and that the Commissioner of Labor and Industry in the bulletins issued by the Department print all available information upon the subject of safety devices and accident prevention and the arrest of occupational diseases. I am not so sure of my status at this conference that I could offer this in the form of a resolution in addition to the Committee's report, but I desire at least to make the suggestion. In any event, before I take my departure, I want to express my appreciation to the Governor and the Chairman and to all the gentlemen participating in this conference for the courtesy and the deep interest manifested."

ADDRESS BY VAN MANNING.

Van Manning, Chief of the Bureau of Mines, was then introduced, and as the hour was late, asked leave to submit his address in manuscript form, to be printed in full in the next issue of the Department's Monthly Bulletin.

Van Manning's address, on the subject of "Mine Accidents and their Prevention" is as follows:

Gentlemen: In 1914, the last year for which statistics are available, there were approximately 383,000 persons employed in or about the mines and quarries in the State of Pennsylvania, and the total fatalities among these workers were 1,028. These figures do not include the men employed at coke ovens or at various ore dressing and smelting plants, except blast furnaces, that reported accidents. Although the death rate per 1,000 men employed in mines and quarries was commendably low, being but 2.68 as compared with 3.23 for the United States at large, none of you doubt, I am sure, that the death rate from accidents can be lowered decidedly. For instance, the death rate from accidents in and about the anthracite mines in 1914 was 3.31 per 1,000 men employed, a figure that can most certainly be reduced.

The death of over 1,000 men annually in this State, and the serious injury of at least 5,000 more through causes that in part, at least, are preventable beyond doubt, are matters that deserve your serious attention. As a representative of the Federal Government, I am glad of this opportunity to contribute to the proceedings of this conference and to meet others who are engaged in a work that must appeal to everyone, the conserving of the lives of our countrymen.

It is not possible for me in the time at my disposal to discuss in detail the many causes of mine accidents and to point out all the preventive measures that may be and should be used. Nor shall I burden you with statistics of fatal and nonfatal accidents in the various classes of mines and quarries in the State, and compare these statistics in detail with those for other states and the whole country. Neither is it my intent to dwell at length on the work of the Federal Bureau of Mines or to discuss matters concerning which opinions differ widely, such as the relative duties and responsibilities of the operators and the miners, or the risks taken by miners and by men of less experience.

Fatality rates given in rank of importance as coal-producing States.

State.	Period.	Fatality rate.		Fatality rate. 1914.		Average for 5 years. 1910-1914.
		Per 1,000.	Production per death.	Per 1,000.	Production per death.	
Pa. (bitum.), ...	1877-1913, 36 yrs.	2.87	271,832	2.18	368,118	2.87
Pa. (anthracite), ...	1870-1913, 44 yrs.	2.42	124,968	3.31	152,641	3.57
West Virginia, ...	1885-1913, 29 yrs.	4.97	160,635	7.64	128,971	5.29
Illinois, ...	1885-1913, 29 yrs.	2.52	251,960	2.43	298,299	2.17
Ohio, ...	1884-1913, 30 yrs.	2.39	251,152	1.41	294,424	2.75
Kentucky, ...	1888-1913, 26 yrs.	1.93	292,541	2.12	334,144	2.34
Alabama, ...	1893-1913, 21 yrs.	5.25	118,865	5.32	121,824	7.12
Indiana, ...	1895-1913, 19 yrs.	2.16	291,062	1.90	378,208	2.20
Average, U. S., ...	1870-1913, 44 yrs.	3.32	177,083	3.22	209,261	3.56

We are all familiar with the excellent work being done by the Pennsylvania State Mine Inspection Service and I believe we all are ready to acknowledge the debt that the mining industry of the country owes the chief mine inspector of this State for his efforts to make mining safer, and especially for the wealth of detailed information on mine accidents that he has given to the industry through his annual report. As that information is readily available I shall not attempt to review it, nor to discuss it in any detail. However, as the theme assigned me is "Mine Accidents and their Prevention," I shall briefly outline some of the chief causes of mine accidents and offer for your consideration a few suggestions on their prevention. Inasmuch as out of the 383,000 miners reported as employed in this State in 1914, there were 362,000 employed in or about coal mines, I shall confine my remarks to coal mining.

Falls of roof and of coal are still, as they have been, the chief source of fatalities in coal mines. In 1914 they caused 461 of the deaths in the coal mines of Pennsylvania, and 1,130 in the coal mines of the United States. Other causes in the order of their importance are mine explosions (gas or dust, or both), mine cars and locomotives, explosives, and electricity.

The fatality rate in the Pennsylvania anthracite mines for five years, 1910-1914, inclusive, was 3.57 per 1,000 men employed, as compared with 3.31 per 1,000 in 1914. In the bituminous mines, the average rate for five years was 2.87 per 1,000 men employed, as compared with 2.18 per 1,000 in 1914. This reduction shows clearly that inspectors and operators are striving to reduce accidents, for the hazard of mining is undeniably on the increase.

The hazard is increasing because mines are becoming larger and are employing more men. Consequently, not only are there many more points in a mine at which fatal accidents may occur, but a great accident imperils the lives of many more men. An explosion that might have killed 25 or 30 men a few years ago, may now trap hundreds. Furthermore, the area of worked-out ground is larger, so that there are large numbers of abandoned rooms and entries in which gas and dust may accumulate to increase the risk of explosions as well as their violence.

As mines grow larger they necessarily require more extensive haulage systems, more locomotives and more mine cars, and thus the danger from haulage accidents grows. As the mines go deeper, the upper workings of slope and shaft mines naturally become drier, and in bituminous mines the dust that accumulates in these upper workings is naturally dry, and the hazard of widespread explosions, unless preventive measures are taken, becomes much greater, also, as the mines go deeper, the roof pressure increases, thus adding to the hazard of roof falls.

The increased risk due to these principal hazards is being combated by efficient mine inspection in the various States, so that the fatality rate for coal mining in the United States as a whole has declined since 1907, being 4.87 per 1,000 in that year, and only 2.95, the lowest figure since 1898, in 1915. Inspection, education, and co-operation have brought about this gratifying result.

How much is being done by the State inspectors and by operators in the State of Pennsylvania will be evident from a few figures. In 1914, there were 43 companies in Pennsylvania that employed underground more than 57,000 men, yet had a fatality rate of only 1.76 per 1,000 men employed. These 43 companies averaged 566,112 tons of coal for each life lost, which is far above the average for the United States. One of the companies produced approximately 12,000,000 tons with a loss of only 12 men, or one death for each million tons of coal mined. Moreover, there are, in Pennsylvania, 13 coal companies that have not had a fatal accident in a period of 15 years. In 1914 there were 21 companies that produced in all 8,700,000 tons of coal and employed 9,144 men without having a single fatality.

Although falls of roof and coal cause by far the largest number of accidents, yet potentially there is in many mines grave danger of explosions which may kill large numbers of men, and for this reason are especially dreaded. In fact, were it not for the precautions already taken by many operators, particularly in mines that make more or less gas, the toll of life from explosions would be much larger than

it is. I think one may safely say that if the mining methods and the care to prevent accidents were no better than they were 25 or 30 years ago, the number of disasters in the coal mines of Pennsylvania, because of the greater extent of the workings, the increasing depths, and the larger number of men exposed to hazards, would be appalling.

In view of the fact that some of the most gaseous mines in the world are found in the anthracite fields and that the dust in many of the bituminous mines of western Pennsylvania is highly explosive, I think that the mining industry is to be congratulated on the comparatively small loss of life from such disasters. Yet the number of deaths that do occur from explosions should be lessened. Fortunately, as regards anthracite mines, anthracite dust by itself is not explosive, but in those mines the precautions toward improving the ventilation at working faces, the increased use of electric safety lamps in place of flame safety lamps, and the more thorough education of the miners, are all tending to lessen the number of gas explosions.

It is most gratifying to me that the electric safety lamp, with the development of which the Bureau of Mines has had much to do, has been so extensively adopted. I have not the figures for the number that are in use in Pennsylvania, but hope that with the new statistical forms which were planned at the recent conference of State Mine Inspectors in Washington such data will be available in the future.

In the bituminous fields of Pennsylvania, not only is fire damp to be guarded against, but coal dust. Undoubtedly many improvements are being effected in the proper watering of the mines, as well as in the use of shale dust or rock dust, which has been found to be very effective in tests made in the experimental mine near Bruceton.

The efficiency of rock dust is now being tried out in co-operation with several operators in some of the large mines, and the results so far obtained are of much promise as regards both efficiency and cost. The efficiency of the method is being checked by the collection of dust in entries and rooms, after the rock dust has been applied, and the testing of these samples to determine whether the content of combustible matter is low enough to prevent propagation of an explosion. Rock dust also has the merit of acting like whitewash in whitening the surfaces of the mine passageways, so that the illumination by the miners' lights is much more effective, and in this way, probably, many lesser accidents will be prevented. The Bureau of Mines does not consider that rock dusting is any more effective in preventing explosions than watering, provided the coal dust is

thoroughly wet, but there is much difficulty in keeping coal dust wet where large volumes of air are circulating, whereas rock dust need be applied only from time to time (in some places not needing renewal for three or four months), according to the rate at which fine coal dust is deposited in the roadways.

Aside from the use of safer mine lamps and the greater attention given in bituminous mines to rendering accumulations of coal dust incapable of propagating an explosion, other preventive measures are having their effect.

Explosives.

Short-flame explosives were first introduced in the coal mines of Pennsylvania at Johnstown in 1902, and since that date their use has increased rapidly. In 1909, the Federal Government established at Pittsburgh a station where explosives are tested to determine their permissibility for use in dusty or gaseous coal mines. The explosives that pass the tests and are approved for use under prescribed conditions are termed permissible explosives. Through the introduction of these quick-flame explosives a potential danger to life has been greatly lessened.

In the bituminous coal mines the fatality rate from explosions has been reduced from 3.39 per 1,000 men employed, in 1903, to 0.96 per 1,000 men in 1914, largely as a result of the use of permissible explosives.

Electricity.

Investigations have been made to determine the extent to which the use of electricity in coal mines may cause dust or gas explosions, and the ways in which the risk of miners being injured or killed by shock may be lessened. As the result of these investigations manufacturers have devised safer types of apparatus and the State of Pennsylvania has enacted a most excellent law governing the use of electricity in coal mines.

Rescue and First Aid Apparatus and Training.

The relative merits of the various types of apparatus used by miners in rescue and in first aid work at a mine disaster have been investigated, with the result that important improvements have been made. In connection with this investigative work the Bureau of Mines has conducted an educational campaign among miners throughout the country, training them in rescue and first aid methods, so that in the event of a disaster there may be a sufficient number of trained men at or near the mine ready for immediate rescue and first aid work.

With the co-operation of miners and mine operators, the bureau has developed this work, done through its rescue cars and stations, into an agency for aiding in the rescue methods and in first aid to the injured, and in advancing the general movement toward greater safety in all branches of mining. Not the least of the benefits resulting from this work is the promotion of good citizenship among miners through the demonstration of the Government's interest in their welfare.

The results of first aid training are of direct benefit, not only in lessening accidents, but in decreasing the danger of infected wounds, suffering, and death after accidents. Although this training is part of the educational work of the bureau, other organizations and many private concerns are engaged in similar work, and the work is being extended by those who receive the training. First aid at mines was started in England about 1880 and in 1899 the Delaware & Hudson Company through its physician and surgeon, Dr. M. J. Shields, organized a first aid team in the anthracite field of this State. Since then the work has extended until nearly every large company has its first aid teams. In 1913, 47 lives were saved by prompt treatment rendered by this efficient agency in the Pennsylvania coal fields.

Hospitals.

In connection with first aid, we very well think of the work being done by the hospitals that are now maintained by the State or by various corporations.

Mr. Roderick in his annual report for 1914, in summing up his statements with reference to hospitals at mines, says: "There are 58 hospitals at which during the year treatment was given to 12,153 miners, and 4,774 members of miners' families. Ten of these institutions are supported entirely by the State; 47 by State and contributions from other sources; and one by the Cambria Steel Company alone. The State appropriation for these hospitals in 1914 was \$1,165,284."

Education.

Educating miners to a realization of the dangers to which they are exposed must inevitably aid in reducing accidents. Educational work is being conducted by mining institutes, vocational schools, and the Y. M. C. A. In addition, a number of the larger mining companies are conducting educational campaigns for the benefit of their employes by publishing and distributing circulars and pamphlets. Particularly worthy of note is the small volume published in 1912 by the Delaware, Lackawanna & Western Railroad Company,

and entitled "Mine Accidents and Their Prevention." This publication contains 200 illustrations which show the miner the risks he takes in his daily work, and one of its purposes is to give a knowledge of colloquial English to the non-English-speaking workers.

The Federal Bureau of Mines is conducting its educational campaign by giving instruction in first aid and rescue work, and by publishing and distributing miners' circulars, technical papers, and bulletins relating to accidents and diseases and their prevention.

In some states—I trust their number will increase—the mine inspectors have adopted the plan of appealing directly to the miner through the medium of brief circulars or leaflets. One just issued by Mr. Edwin Higgins, Chief Mine Inspector of California, contains the following "Thought Blasts:"—

A first aid man who knew it all was asked: "How would you treat one of your mates who had been badly frost-bitten?" The know-it-all responded promptly: "Why, rub him with a man who had a touch of sun-stroke."

Look out for the other man, you might hurt him.

Recklessness is no indication of courage; brave men are always cautious.

Ty. Cobb says: "No, I do not drink, it dims my batting eye."

Never do anything that you know is dangerous in order to show some one else that you are not afraid to do it.

Look out for the greenhorn and show him how to keep from getting hurt.

Get the safety habit—it is the only habit which will never injure you.

A broken rule usually means a broken bone.

A rusty turned up nail is in the same class as a poisonous reptile. Turn them both down.

Dynamite or air-ships are not the most dangerous things in the world. The slipping ladder causes approximately 6,000 deaths and 200,000 accidents every year in the United States. The ladder, carelessly used, is one of the most dangerous things in the world.

Co-operation.

Probably the most notable accomplishment of the Bureau of Mines in its efforts to increase safety in mining has been the gaining of the co-operation of all possible agencies in behalf of this movement. The

bureau has steadfastly endeavored to enlist the support of all State and Federal agencies already in operation. Further, it has solicited the co-operation of mine operators and representatives of organized labor. It is only one of several agencies working to accomplish a great end, and whatever results it has obtained have been made possible through the efforts and assistance of the individuals and organizations mentioned.

The fact that large employers of men and persons interested in mine accidents and their prevention are gathered here to take co-operative action leads me to place especial stress on the subject of co-operation. One point that I wish to make is that co-operation to prevent accidents is not always as inclusive as it should be. No one is so vitally interested in accident prevention as the workman himself, yet in many workshops and in many mines throughout the country there is no co-operation among the men to this end. On the other hand, there are establishments where such co-operation prevails, and in these you find the lowest accident rates and the lowest fatality rates. Further, if you will inquire at any factory or mine that is working in a co-operative way with the men you will find there has been an almost startling decrease in the number of fatal accidents.

My plea is that each mining company and each industrial establishment represented here shall appoint from among the men at its plants a committee or committees on safety, or have the men appoint the committee and organize for safety work.

The appointment of committees of miners to examine conditions in the mines in which they are employed is authorized in Great Britain by the Miners' Act of 1911. I think such provision is part of the mining law of Prussia. At least one large iron-mining company in this country has voluntarily adopted the system.

Question Box.

At a number of establishments it has been the custom for years to maintain a question or suggestion box in which the men are invited to place any suggestion for better or more efficient ways of doing work. I am told that many of the suggestions have been worth thousands of dollars to the plants concerned. Why not make the suggestion box universal and give the men to understand that they are at all times requested not only to make suggestions on efficiency, but also on safety? Employees should be encouraged to point out a dangerous place about a factory or a mine and to suggest a remedy if they have one.

The safety committee could discuss these suggestions, and if necessary talk them over with the man making the suggestion, or take them up at some general meeting of the men.

Anyone who has not tried this plan or seen it in operation will be surprised at the value of the suggestions it brings forth, suggestions that might not otherwise be thought of by the men in charge or even by the safety committee itself. The plan illustrates the long-known fact that the thoughts of many men are apt to be better than the thoughts of one man. You have seen this fact demonstrated in your daily life, in your conference with your office officials, and especially in your business dealings.

A number of the mining companies of the United States have already endeavored to assure the co-operation of their men, not perhaps as much through a suggestion box as through the employment of a safety engineer or inspector who visits frequently all parts of the establishment or mine and confers with the men on improvements that would increase safety.

As one result of its activities the Bureau of Mines is being called on to supply men who can serve as safety inspectors. As the mining industry reaps the benefit, the bureau is glad to supply such men, although it has to train a new man until he is as efficient as his predecessor.

In conclusion, permit me to say that whatever you do to decrease accidents, your efforts must be positive and continued. Eternal vigilance is the price of safety as well as of liberty. You must keep up the campaign; you must show the men every day that it is their campaign, that their safety is involved, and that thoughtlessness means suffering and death to them and possibly poverty and want to their families. Even compensation laws, splendid in themselves, do not prevent the taking away of a father from being an irreparable loss to his boys and girls.

Deaths from accidents will continue. Each industry has hazards that can not be abolished. But in the United States the death rate from accidents is still inexcusably large. Some statistics contend that 35,000 workmen are killed in the United States each year while following their occupations and that 2,000,000 are injured. For my part, I firmly believe that the present number of deaths and injuries from accidents could be cut squarely in half in perhaps two years' time were the movement for greater safety to receive through the country the attention that it deserves.

To save workmen from injury and death is not only humanitarian (and this alone is sufficient reason for making every possible effort), but also a direct contribution to national efficiency. The impoverishment of the world's supply of trained workmen through the unparalleled slaughter of men in Europe may soon be felt seriously in the

United States. This country in outstripping all others in industrial growth, has had to take yearly many thousands of men from Europe. It is possible immigration will decline greatly, that this country will not be able to obtain the men its industries will require. One result of such a condition will be that the value of human life will be much greater than ever before. You may call that the economic side. I call it the sordid side. But outside of any such considerations we should, merely as citizens of this great Nation, strive continually to do all we can to reduce injuries, suffering, and death from accidents. The work is not one to be delegated exclusively to a State or a Government bureau. It concerns each one of us, and our efforts to improve conditions should be part of our daily life.

MOTION PICTURES ILLUSTRATE SAFE PRACTICES AND RESULTS OF CARELESSNESS.

William Rice, Chief Engineer of the Bureau of Mines made a short address, following Mr. Manning, and then exhibited a number of reels of motion pictures showing the interior of a bituminous coal mine with modern equipment.

Lessons of safety, as taught by motion picture films, were also presented to the conference earlier in the session.

By the courtesy of Marcus A. Dow, General Safety Agent of the New York Central Lines, the films presenting "The House That Jack Built" were shown during the afternoon session of the conference. This picture was made by the New York Central Lines at a cost of approximately \$40,000, for the advancement of safety among employes of the railroad company. Its safety features apply particularly to employes of railroads and portray the wasteful results of carelessness.

After the showing of the pictures, Dr. Jackson thanked all those present for the interest manifested, and stated that a report of the proceedings would be incorporated in the next issue of the Monthly Bulletin of the Department of Labor and Industry.

The meeting then adjourned sine die.

VIEWS EXPRESSED SINCE THE CONFERENCE.

A number of letters have been received by Governor Brumbaugh since the Industrial Accident Prevention Conference was held. Among the suggestions received are the following:

From Samuel Gompers, President American Federation of Labor: "In my judgment there should be created a central bureau in the Department of Labor and Industry of Pennsylvania for the Museum of Safety and with several branches in the industrial centers of the State

"At the meeting at Harrisburg I made this suggestion late in the afternoon, but am unaware as to what was done with it."

From James Matthews, President District No. 9, United Mine Workers of America: "In my opinion, if the relationship between employer and employe became closer it would, in a way tend to lessen accidents in the various occupations throughout the State."

From William Young, President Philadelphia Typographical Union No. 2: "It will give me pleasure to give this important subject very careful consideration, and to submit to you at a later date any suggestions which I may think would be helpful in promoting the end desired."

From Clay F. Lynch, General Superintendent, H. C. Frick Coke Company, Scottdale, Pa.: "It is my opinion that the Commonwealth or some of the State Departments working under your direction can be of great help in the matter of reducing industrial accidents by conducting a campaign of education among working men and the public generally."

"It seems to me that motion pictures are the most powerful medium through which to conduct this campaign. You will recall the Federal Bureau of Mines has a number of railroad cars equipped as stations in which to train men in the use of helmets, breathing devices, etc., and that these cars are moved about among the various mining districts in the United States. It occurs to me that similar units equipped with moving picture apparatus could be used by the State in this campaign. Factory districts or towns could be visited and certain reels giving information applicable to those places could be shown, either in the cars or in halls. Mining districts could be visited in the same way and other reels shown there.

"The campaign could be directed not only with a view of educating employes but also the employers and the public as well."

From D. P. Bennett, Vice President and Treasurer, Pittsburgh Steel Company, Pittsburgh, Pa., are received the following suggestions: "First—That the endeavor be made to have subsequent conferences of a more practical character. That is to say, addresses by leading employers, or articles contributed by them, showing how and in what way they had specifically endeavored to safeguard the lives and limbs of their men. Such talks or reports, based upon actual experiences, would be, I think, beneficial, and would undoubtedly develop a discussion which would bring out useful hints and suggestions.

"Second—That a statement be furnished the delegates showing:

- (a) The number of manufacturing plants in the State.
- (b) The total number of workmen employed in these plants.
- (c) A classified list of the accidents reported to the Department of Labor and Industry.

"Such a table would give the delegates an idea, first, as to the percentages of fatal and other accidents to the total number of employes, and, second, as to how the accidents which they had been unfortunate to experience in their own individual works compared with the aggregate of the State."

ATTENDANCE AT CONFERENCE AS INDICATED BY REGISTRATION CARDS.

REPRESENTATIVES FROM RAILROAD COMPANIES.

Name.	Firm.	City.
W. H. Truesdale, ...	D. L. & W. Railroad Co., ...	New York.
R. R. Reese, ...	D. L. & W. Railroad Co., ...	Seranton.
D. P. Reese, ...	D. L. & W. Railroad Co., ...	Plymouth.
L. F. Loree, ...	Delaware & Hudson Co., ...	New York.
Benjamin F. LaRue, ...	Lehigh Valley Railroad Co., ...	New York.
John Duffy, ...	Lehigh Valley Railroad Co., ...	New York.
Thomas H. Carrow, ...	Pennsylvania Railroad Co., ...	Philadelphia.
E. B. Hunt, ...	Pennsylvania Railroad Co., ...	Philadelphia.
R. H. Newbern, ...	Pennsylvania Railroad Co., ...	Philadelphia.
John C. Ross, ...	Pennsylvania Railroad Co., ...	Philadelphia.
C. H. Ewing, ...	Philadelphia & Reading Railway Co.,	Philadelphia.
N. W. Jones, ...	Philadelphia & Reading Railway Co.,	Philadelphia.
Wm. H. Kinter, ...	Philadelphia & Reading Railway Co.,	Philadelphia.
John T. Brady, ...	Philadelphia & Reading Railway Co.,	Philadelphia.
E. K. Conneely, ...	Pittsburgh & Lake Erie Railroad Co.,	Pittsburgh.
James L. Roche, ...	Pittsburgh Railways Co., & Duquesne Light Co., ...	Pittsburgh.

REPRESENTATIVES FROM BROTHERHOOD OF RAILROAD TRAINMEN.

Name.	Address.	City.
G. B. Rowand, ...		Linwood, Pa.
M. T. Robinson, ...	2148 Susquehanna St., ...	Harrisburg, Pa.
S. L. Curry, ...	6413 Paschal Ave., ...	Philadelphia, Pa.
Victor Marietta, ...	1248 W. Arch St., ...	Shamokin, Pa.

REPRESENTATIVES FROM COAL COMPANIES.

Name.	Firm.	City.
W. H. Williams, ...	Delaware & Hudson Co., ...	New York City.
Clay F. Lynch, ...	H. C. Frick Coke Co., ...	Scottsdale.
E. H. Suender, ...	Lehigh Coal & Navigation Co., ...	Lansford.
C. F. Huber, ...	Lehigh & Wilkes-Barre Coal Co., ...	Wilkes-Barre.
Geo. H. Halbershadt, ...	Phila. & Reading Coal & Iron Co., ...	Pottsville.
Edw. E. Kaercher, ...	Phila. & Reading Coal & Iron Co., ...	Pottsville.
John B. Kerr, ...	Seranton Coal Co., ...	New York.
Wm. L. Allen, ...	Seranton Coal Co., ...	Seranton.
Robert A. Quin, ...	Susquehanna Coal Co., ...	Wilkes-Barre.
M. H. Taylor, ...	Pittsburgh Coal Co., ...	Pittsburgh.

REPRESENTATIVES FROM UNITED MINE WORKERS OF AMERICA.

Name.	Address.	City.
Stephen Reap, ...	111 Agnes Ave., ...	Olyphant, Pa.
John McCabe, ...		Philipsburg, Pa.
Thomas R. Davis, ...		Williamstown, Pa.
David Fowler, ...	1137 W. Locust St., ...	Scranton, Pa.
George W. Henry, ...		Tower City, Pa.
C. C. Boner, ...	633 E. Broad St., ...	Tamaqua, Pa.
Edw. L. Rowe, ...		Lykens, Pa.
Edward Harris, ...		Lykens, Pa.

REPRESENTATIVES FROM IRON AND STEEL COMPANIES.

Name.	Firm.	City.
Howard Wood, Jr., ...	Alan Wood Iron & Steel Co., ...	Philadelphia.
Wilbur Collins, ...	Alan Wood Iron & Steel Co., ...	Philadelphia.
W. F. Lowry, ...	American Car & Foundry Co., ...	Berwick.
G. M. Cooper, ...	American Bridge and American Sheet & Tin Plate Co., ...	New York.
Jas. T. McCleary, ...	American Iron and Steel Institute, ..	New York.
D. G. Scott, ...	American Iron & Steel Mfg. Co., ...	Lebanon .
G. T. Fonda, ...	Bethlehem Steel Co., ...	S. Bethlehem.
J. C. Davies, ...	Cambria Steel Co., ...	Johnstown.
H. D. Williams, ...	Carnegie Steel Co., ...	Pittsburgh.
Jos. H. Pendleton, ...	Carpenter Steel Co., ...	Reading.
J. W. Dougherty, ...	Crucible Steel Co., of America, ...	Pittsburgh.
L. A. Way, ...	Duquesne Steel Foundry Co., ...	Pittsburgh.
James S. Lanahan, ...	Fort Pitt Malleable Iron Co., ...	Pittsburgh.
D. R. Tracy, ...	Harrisburg Pipe & Pipe Bending Co.,	Harrisburg.
S. W. Shaw, ...	Jones & Laughlin Steel Co., ...	Pittsburgh.
Newell C. Bradley, ...	Midvale Steel Co., ...	Philadelphia.
William B. Dickson, ...	Midvale Steel & Ordance Co., ...	New York.
Quincy Bent, ...	Pennsylvania Steel Co., ...	Steelton.
D. P. Bennett, ...	Pittsburgh Steel Co., ...	Pittsburgh.
C. J. Morgan, ...	Pittsburgh Steel Co., ...	Pittsburgh.
L. S. Wright, ...	Pressed Steel Car Co., ...	Pittsburgh.
C. L. Close, ...	United States Steel Corporation, ...	New York.

REPRESENTATIVES FROM LABOR UNIONS.

Name.	Union.	Address.
Samuel Gompers,	American Fed. of Labor,	2122 First St., Washington, D. C.
Philip Wagaman,	Penn. Federation of Labor,	..Centennial, Pa.
John F. Meyer,		
Vice Pres.,	Penn. Federation of Labor,	..Jeanette, Pa.
S. R. Turner,	Penn. State Legislative Board	Pittsburgh.
O. R. G., ...		
C. T. Quinn,	Penna. Fed. of Labor,	408 Woodbine St., Harrisburg, Pa.
A. P. Bower,	Penna. Fed. of Labor,	111 N. 6th St., Reading, Pa.
William F. Kelly,	Penna. Fed. of Labor,	17 Russell St., Edwardsville, Pa.,
James H. Maurer,	Penna. Fed. of Labor,	1355 N. 11th St., Reading, Pa.
Theodore Eichhorn	Penna. Fed. of Labor,	1146 Brown Ave., Erie, Pa.
R. F. Kirchner,	..Ex. Board State Fed. of	426 Lackawanna Ave., Scranton,
	Labor,	Pa.
Steve McDonald,	..Scranton Cen. Labor Union,	817 Richmond St., Scranton, Pa.
Robert W. Beattie,	Iron City Central Trades Labor Temple,	Pittsburgh, Pa.
	Council,	....
David Williams,	..Cen. Trades & Labor Coun.,	838 N. 7th St., Allentown, Pa.
Elmer Spahr,	Bricklayers, Masons & Plas-	412 W. Princess St., York, Pa.
	terers International Union,	..
P. J. Shea,	St., Railway Employes,	101 S. Irwig St., Scranton, Pa.
William Young,	..Phila. Typographical Union	223 S. 61st St., Philadelphia.
	No. 2,	

REPRESENTATIVES FROM MISCELLANEOUS INDUSTRIES.

Name.	Firm.	City.
John Bailey,	Bell Telephone Co.,	Philadelphia.
Henry C. Esling,	J. G. Brill Co.,	Philadelphia.
S. Horace Disston,	Henry Disston & Sons,	Philadelphia.
Hamilton Disston,	Henry Disston & Sons,	Philadelphia.
Edward G. Steinmetz,	Electric Storage Battery Co.,	Philadelphia.
Herbert Lloyd,	Electric Storage Battery Co.,	Philadelphia.
R. S. Hubbard,	Harrison Bros., & Co., Inc.,	Philadelphia.
C. W. Heppenstall,	Heppenstall Forge & Knife Co.,	Pittsburgh.
R. A. Medina,	Independence Inspection Bureau,	Philadelphia.
Henry A. Reninger,	Lehigh Portland Cement Co.,	Allentown.
J. D. James,	New Jersey Zinc Co.,	Palmerton.
H. S. Wardner,	New Jersey Zinc Co.,	Palmerton.
J. H. Fox,	Pittsburgh Plate Glass Co.,	Pittsburgh.
Paul Thompson,	United Gas Improvement Co.,	Philadelphia.
James B. Douglas,	The U. G. I. Company,	Philadelphia.
R. M. Wynn,	John Wanamaker,	Philadelphia.
Wm. Rhodes, Supt.,	Baldwin Locomotive Works,	Philadelphia.
Edgar C. Thomas,	Agent in	
	charge of Compensation,	Baldwin Locomotive Works, ...
		Philadelphia.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



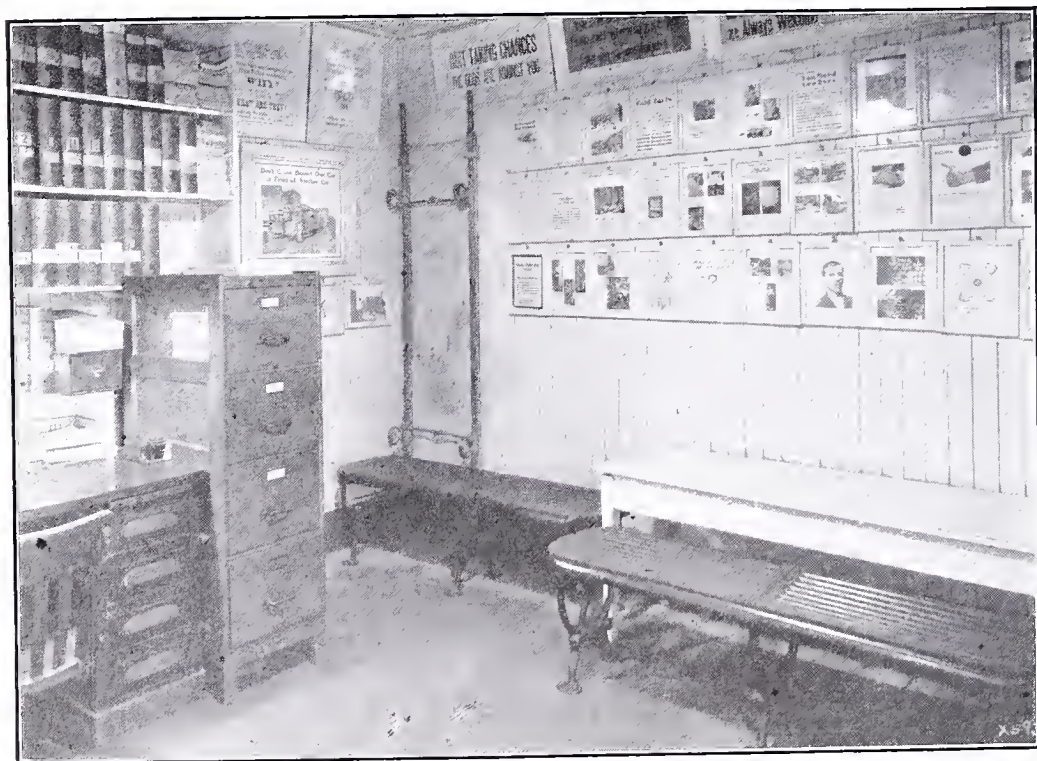
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Emergency dispensary and connected waiting room for treatment of injured employees at the J. G. Brill Company's plant in Philadelphia. Industrial establishments are invited to send similar photographs of their dispensaries to the Department of Labor and Industry at Harrisburg for a permanent exhibit.

EXTRACTS FROM ADDRESS OF JOHN PRICE JACKSON, COMMISSIONER OF THE PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY, BEFORE THE BROTHERHOODS OF RAILWAY TRAINMEN, PITTSBURGH, PA., APRIL 30, 1916.

This great body of people and representative citizenry of our country may, with particular propriety, give largely of its attention, first, to the protection of our homes and firesides, and second, to methods for the peaceful promotion of the prosperity of the workers, and of the industries in which they work.

One of the most necessary steps in accomplishing this result, is to prevent our great army of workers from having the value of their labor open to the merciless attack of the inadequately paid labor abroad. While studying labor conditions in Europe a couple of years ago, I found, by actual personal investigation that in most industries, competing with ours, the compensation for labor is far below that for equal service in this country, and in addition, that both the hours of labor and conditions of labor could not as a whole compare with those in this country.

I believe that, to a certain extent, wages and conditions can be maintained higher in this country than in Europe and Asia, on account of the great natural resources of this country. and the genius of our people, but our country is being rapidly filled with population and our natural resources are largely in the course of utilization, while our inventive ability and adaptability are to a large extent being offset by the lessons the industrial peoples of other countries have learned from us.

Therefore, it is absolutely essential, if we are to maintain the present high intelligence and comfort in life of the great mass of our people, that we erect some substantial and effective barrier against products produced under less satisfactory conditions and lower wages elsewhere. The only barrier which can be erected to accomplish this purpose, is the proper regulation of competitive imports from abroad, and this regulation may be maintained most readily through the imposition of suitable protective tariffs.

When the end of the great war comes, wages, hours of labor, and conditions of work will be even less generous in the countries abroad than they were in times past, and unless we immediately take intelligent steps to deal with the subject, there will be dumped into this country enormous quantities of products at prices which will be ruinous to our industries, and the workers therein. I therefore urge, with the greatest sincerity and earnestness, that you present, with the hundreds of thousands of those associated with you, give careful attention to this subject, and use your influence to see that your government is fully awakened to the need of having available through a suitable tariff, and otherwise, implements whereby it can prevent such a terrible catastrophe falling upon us and ours.

Governor Brumbaugh has made his platform the improvement of conditions and prosperity of labor and industry, and national protection and justice to all the people. His steadfast adherence to this platform during the past year and a half has already placed Pennsylvania in the van in promoting industrial policies.

Industrial Disputes.

In this city to-day is an enormous industrial dispute. Through this, great suffering is coming to all touched thereby, both employes and employers. Such suffering and loss should be unnecessary among the people of the intelligence and brotherliness of Americans. When you have a public difference with your neighbor, if you are unable to settle the difficulty between yourselves, you take it to the courts and by peaceful civil action, your respective rights are determined. Likewise, labor and capital should develop, in connection with the government, methods whereby justice may be obtained for the worker and the employer without recourse to methods which involve such great unnecessary losses. We have recognized the right of tens of thousands of people to pool their savings in associations or corporations in order that those savings may have larger earning power, and in order that the intricate machinery of modern industry and civilization may be constructed and utilized. We, therefore, must also recognize the right of thousands of employes to pool together their influence in order that their labor may bring to them the largest possible returns. But to insure justice to both sides and to the silent third party, the public, such organizations, whether of capital or labor, should be under laws to make them properly responsible to the government for their acts.

It is rather difficult to outline a concrete plan for civil and peaceful settlement of labor disputes, but there have been experiments carried on in some of our States and some of the foreign countries

that throw light upon the subject. Thus, in one of our States either the employer or the employes who are dissatisfied with their conditions are expected to notify designated government officials before any drastic steps of reprisal, are taken. These officials then have the opportunity to act as conciliators and in most cases become the instruments whereby acceptable relief to the injured party is obtained. The work of our own conciliators of the Department of Labor and Industry, Mr. Patrick Gilday, with his associate, Mr. James A. Steese, have shown the enormous possibilities for good which may be accomplished through such a system if worked out and fully developed. In Australia, Canada, and other places formal courts of arbitration or conciliation have been established and have indicated a possible form of solution of the labor versus capital problem.

Industrial Depression.

Another vital question is facing you and one which should have your earnest attention and support. The present day in the United States is one of excessive prosperity. So sure as the sun goes down at night will this era of prosperity sooner or later be replaced by a period of depression similar to those which have occurred in years past. This coming era of hunger, want, and idleness may reach us at the close of the war or may be delayed to a period farther on, but the very nature of the civilization and industrial and business organization of the world makes such hills of prosperity and valleys of want inevitable. It is our duty, while there is time, to devise means whereby we may at least in some measure fill up the valleys and prevent the enormous waste occasioned by them. Your government should be a leader in this work, as it is especially constituted for such leadership. Let us propose to our next Legislature that it make a contingent appropriation of many millions to be expended for highways, improvement of waterways, and the building of bridges or other public works to be used only when, in the judgment of the Governor, or a board of practical men associated with him, times have reached such a state of depression as to make the expenditure of this money necessary to prevent want and the waste of labor which is caused by enforced unemployment. Let us instruct the Governor, at the time when this appropriation is made, that it shall only be used when, in his judgment and that of his advisory board, such a time has arrived. Let us also instruct the Governor to see that his assistants in the administration departments of the government, delay the promotion of permanent works, which are not immediately essential to our welfare, from times of prosperity

to times of industrial depression. Let us also ask our Legislature to put in motion such legislation as will eventually, by an amendment to our constitution, or otherwise, give our counties, our cities, and our towns the right, after having obtained the approval of the Governor and his advisory board, to issue notes, when the times of depression come, in order to provide funds for promoting local public works; let us have it arranged so that these notes may be issued irrespective of the indebtedness of the community, but let us see to it that they are so surrounded by safeguards that they must be retired when the times of prosperity return. By such methods would the government not only be a practical leader in saving much wealth to the Commonwealth, the wealth of millions of man-days of labor, but also it will have bravely hewn the way through binding and senseless tradition which will be followed by our industrial leaders. Already many private corporations are delaying permanent work to periods of depression in order that they may at such times keep their forces at work. But such practice is only in vogue among those of unusually broad vision and intelligence. It is scarcely recognized as a policy, but with the State of Pennsylvania as a leader in such work even the timid industrials will quickly follow in the wake.

When we look back to the fall and winter of 1914, recall the severe suffering of the mighty army of involuntarily unemployed in this Country, and figure the enormous consumption of supplies by this army, however meagre the allotment to the individual, without the compensating production of its labor, we cannot be other than deeply impressed by the economic and humane need of suitable preparation against a recurrence of similar conditions.

Bureau of Employment.

In this matter of employment there is much waste which is unnecessary and which in the final analysis means lower wages and longer hours for the worker, through our failure to connect quickly, in a businesslike manner, the man who wants to work with the man who has a position to offer. In view of this, under Governor Brumbaugh's inspiration, improved employment laws were enacted by the last Legislature, and, although the appropriation for support ing them was small, they have already shown their practical usefulness.

Free agencies are now steadily at work in Philadelphia, Harrisburg, Altoona, Johnstown, and Pittsburgh. This employment system should be tied up to every industrial community of the State

and the State should be tied up to the Nation. The local community, with State aid, should see to it that in its locality or zone the worker and the position are kept in contact. The State should supervise this local work and should act as a transfer agent whereby labor may be transferred from the locality of slack work to the locality of needed labor.

The United States should likewise act as a supervising agency for the various States and, as a transfer agent whereby the excess labor in one State may be connected up with positions in the State needing services.

The railroads should and will, I believe, gladly join in making this transfer work effective by carrying workers from one locality to another at minimum tariff. Remember, please, that your State has already entered, in a practical and successful manner, into this work. But the government asks, to make the work most efficient, that your organization and all other organizations of employes and employers join with it.

I should like to go further into the subject of employment and discuss the need of improving the conditions of seasonal occupations and the elimination of exploitation of the foreigner or other workman who is unable to protect himself.

Accident Prevention.

In closing, I desire to bring another great problem to your attention, which is of most serious importance to the people of this Commonwealth, namely: that of accident prevention. To-day in this one State, workmen are being injured at the rate of hundreds of thousands per year and several thousands are being killed annually. To become fully impressed with the awfulness of this havoc, visit the Bureau of Statistics in the Department of Labor and Industry and read over the deaths and mutilations reported for any one day. Yet Pennsylvania has given much more than average attention to the reduction of this loss. Such awful accident havoc with its attendant terrible suffering to the widows and orphans or the man injured can, to a very large extent, be avoided. The railroads have found it possible to make their passengers practically safe when riding upon their cars, although in the past the loss by injury and death was appalling. As a people, we have taken hold of the 4th of July problem and reduced needless waste of the lives and sight of children to a minimum. Likewise, a practical handling of the industrial hazard can reduce our present losses. The government asks you and all other labor organizations and employers to form safety commit-

tees to deal with this problem, learn to see the danger spot and the danger practices, and learn to have them eliminated. Much of this work is quite simple but the results mean added wealth to our people and the elimination of enormous suffering.

Workmen's Compensation.

But there will never be a complete elimination of industrial accidents. As a result, again under the inspiration of Governor Brumbaugh, a great set of compensation laws were last year enacted by the Legislature. The enforcement of these laws was placed under the direction of the Department of Labor and Industry in a Bureau headed by a Compensation Board. This Board consists of Messrs. Mackey, Leech and Scott, and is effectively assisted by Mr. Furman, Chief of the Bureau of Statistics and Information. The system has been established throughout Pennsylvania in a most businesslike and effective manner and went into effect with practically no injury to the employer, and with great advantage to the workers. Hundreds of widows and orphans and injured men are weekly receiving compensation which enables them to obtain the necessities for a living.

Warning to Self-Insurers.

Here and there, there are to be found a few corporations which have self-insurance, and which have unnecessarily delayed making the benefit payments. If such practices are continued, the corporations will have the privilege of self-insurance withdrawn from them. But with the exception of a few infrequent cases, the hurt employee or his dependents promptly receive the compensation allowed by the law.

In some cases this compensation continues as long as sixteen years or until the youngest child has attained the age where the compensation automatically stops.

Continuation Schools.

I should like to spend an hour with you discussing the proper protection of women and children in industry and particularly to take up with you the continuation schools, to which your Governor has given so much thought. On account of my limitation of time I must limit myself to stating that the continuation schools are a

marked example to the nation of what can be done to aid the individual child to an intelligence and skill which will make him of greater value to himself and family as a producer and will, with his fellows, constitute for this Commonwealth an industrial body of workers unequalled anywhere. Germany has for many years carried on such work and has proven its value. Pennsylvania is the first eastern State to have had the bravery and the good sense to adopt the best elements of such system.

BUREAU OF INSPECTION ISSUES INSTRUCTIONS TO EMPLOYERS.

Attention of employers in general is again called to the necessity for greater promptness in complying with the instructions issued by representatives of the Department after making inspections of establishments.

It has been the policy of the Department to be patient in the matter of allowing time for the completion of such work. This plan has been followed in spite of the fact that under the factory laws the Department is privileged to institute court proceedings without extending the courtesy of giving the employers a memorandum of deficient equipment.

However, if it is found that proper attention and prompt compliance are not accorded to the instructions issued by the inspectors, it will be necessary to appeal to the force of the law. Such action is always deeply regretted by the Commissioner of Labor and Industry because the aim of the Department, in the past, has been to obtain compliance with the law through co-operation rather than by exercising its police authority.

The great majority of employers welcome suggestions which are given by the inspectors, in order to make the plants more safe and healthful for the employes, or to prevent the existence of fire hazards which might tend in time to cause the destruction of the establishments. They are fully aware of the value of such inspections and realize that the service furnished by the State is given in an endeavor to work to the benefit of employe and employer alike. This service will also tend to bring employe and employer closer together.

In a few cases conditions arise which absolutely prevent the completion of the work requested by the inspector on the instruction sheets within the time stipulated. Whenever an employer finds himself in such a situation, it is strongly recommended that before the time allowed expires, he communicate with the Department requesting an extension of time and at the same time, stating the circumstances which have arisen to prevent the completion of the work.

In cases where it can clearly be shown that every reasonable effort has been put forth to have the work done within the allotted period, an extension of time will in all probability be granted. Willful transgressors, however, on the patience of the Department can expect to receive little consideration.

It is hoped that this appeal for co-operation without resort to law will show the few who have been derelict in this matter the necessity for giving prompt attention to all instructions issued by the Department inspectors.

Inspection of Foundries.

The special foundry inspectors are continuing their work in various sections of the State, having quite thoroughly covered Philadelphia, Scranton and Reading. They are now working in Pittsburgh and also in some smaller places. Considerable improvement has resulted from these inspections, and more will undoubtedly come.

Our inspectors find numerous unsafe practices followed not only by the employers, but also by the men themselves. The attention of the latter is directed to the following: laced shoes are worn instead of the "Congress" shoes; ladles are often dangerously built up above the rim to carry a greater load of metal; unsafe piling of material is practiced; and, in some cases, abuse has been observed of equipment supplied for the convenience of the men. On the other hand, employers have failed to provide goggles for chippers, masks or helmets for welders, and proper gangways. A small proportion of the shops are not properly ventilated, unhooded salamanders being used for heating on cold days, and the foundry buildings are improperly lighted. These are some of the points that the employer can correct with small expense.

It is hoped within another year, to have the foundries of this State in such condition that they will be second to none, but this will require the heartiest co-operation from both the employer and the employe. This should be freely given, as it is to the interest and benefit of both to maintain conditions that are safe and are free from injury to health.

Boiler Inspections.

A tabulation of inspection reports on boilers received by the Division of Boiler Inspection during March and April shows the following dangerous conditions existed in boilers at the time the inspections were made. If these inspections had not been made and the dangerous conditions had been allowed to go unnoticed, serious explosions might have occurred. It clearly emphasizes the fact that the provisions of the law which require that boilers be inspected at least once a year by a boiler inspector approved by the Department are necessary as a means of preventing many explosions which could cause great loss of life and damage to property:

82 cases of dangerous scale.

15 cases of dangerous internal corrosion.

20 cases of dangerous external corrosion.

11 cases of dangerous pitting.

69 cases of dangerous tube ends.

10 cases of furnaces out of shape.

18 cases of dangerous fractures.

18 cases of dangerous water gauges.

7 cases of dangerous safety valves.

9 cases of dangerous pressure gauges.

2 cases of dangerous broken stays.

30 cases of dangerous bulges.

48 cases of dangerous unclassified defects.

4 boilers suspended owing to being unfit for service.

2 boilers condemned owing to being unfit for any further service.

Inspection of School Buildings.

The inspection of school buildings is proceeding with good results reported. The Department is co-operating with the State Board of Education, and there is no doubt that there will be a steady forward movement toward greater protection of the pupils in the schools of the State. This is but right; the worker can leave a factory should he feel that conditions are unsafe, but the law compels the child to attend school a certain number of hours each day for a definite

period. This is during the winter when it is necessary to heat the school buildings, and the hazard from fires is therefore greatly increased. It is only fitting that the hazards arising from poor house-keeping and inadequate exits should be eliminated, and to this end this Department and the Department of Public Instruction are working. It is a matter that comes close to every home, and every parent should join in the work and do his utmost to see that the local school board do everything possible to safeguard their children.

In making this state-wide inspection of public schools, parochial schools and public buildings an effort is being made to standardize fire drills, fire alarms and fire equipment.

The records of the inspectors prove that in almost every city or town different signals and alarms for fire drills are in vogue, also that the drills are conducted by means of an established exit. These practices are both detrimental to the efficiency and to the effectiveness of the fire drills. The proper course to pursue would be to make use of front, rear or side exits as the case may be, using one exit for one drill, another exit for the next drill, and so on.

It has also been brought to the attention of the Department, through the medium of its inspectors, that invariably the inmates of these public buildings and schools know little or nothing of the use of the equipment provided in these buildings for emergencies, and in order to facilitate handling this condition, all fire equipment should be placed in a practical as well as easily accessible location. The inmates should be instructed in the proper use of this equipment and the authorities in charge should give this phase of the question their personal attention.

As an illustration of the value of careful training in the use of equipment an instance is cited below:

A school in a small town in the western part of the State had, as part of its equipment, a room set aside and designated as "the sick room." Four boys were appointed by the principal as a Rescue Squad whose duty it was to see whether or not there was anyone in the "sick room" when an alarm was sounded. A pupil was taken suddenly ill while in school and was placed on a cot in the "sick room," this occurring at a time when the members of the Rescue Squad were attending a class in another part of the building. Fire broke out and an alarm was sounded. The pupils were marshaled by the teacher and left the room and the building in perfect order, no one thinking of the sick pupil in the "sick room." While the pupils and teachers at some distance from the building were watching the progress of the fire, they were amazed to see the Rescue Squad issue from the building carrying the sick pupil on a stretcher.

In addition to the foregoing precautions a building superintendent should be appointed to look after the fire equipment, fire alarm system, wiring, electric appliances, etc., daily. He should also receive the complaints of the teachers and inmates for the purpose of correcting these bad conditions should they exist.

Reports of Accidents.

A glance at the report of accidents during the past month is somewhat startling. There are being reported between seven and eight hundred accidents daily, averaging about eight to ten fatal cases. When one considers that these cases cover only those accidents that involve a disability of two or more days one can begin to appreciate the economic loss to this State. A detailed report of causes of accidents for the year 1915 forms an interesting commentary, in that it shows lack of education responsible for many cases; that is, the employer sometimes fails to educate his employes along the lines of safe practices or the employes fail to take advantage of the advice given them. After all is said and done, education is the principal feature of accident prevention work, and is probably the greatest preventive asset. It has been shown that safeguards alone cannot prevent accidents—the employer must go further and educate his men. The advantages of this are obvious; it lessens casualty expense, and engenders greater harmony in the shop.

To sum up, what the Bureau of Inspection, and, in fact, the entire Department, wants first and last is co-operation; not half-hearted but full and voluntary co-operation. In this way, and in this way only, can the employer benefit from the service of the Bureau of Inspection, and, on the other hand, it is only in this way that the work of the Bureau of Inspection can be put on a basis of real efficiency and assistance to employer and employe.

HOW ACCIDENTS OCCUR IN CONNECTION WITH ELEVATORS.

“He Lost Control of His Elevator and.....”

The old, old story. There is a way to prevent it.

John Doe the other day was injured while operating an electric elevator. He was going from basement to top floor when the operating cable broke. He could not stop the car, and it traveled into the overhead work.

John is an everyday workman, doing his duties regularly. He has traveled on this elevator many times and never had an accident until this one. But one is enough. He will probably be crippled for life. There is absolutely no reason for such accidents to occur. The persons responsible for installing this elevator unknowingly planned the accident. Sympathy will not help now, it could easily have been prevented.

Why It Happened,—John's elevator was of a very old type. The machine had no automatic stops, no limit switches, and no car safeties. It was only equipped with ordinary stop balls fastened to operating cable at top and bottom of shaft way. When the operating cable snapped the ball stops were of no use. John was unable to shut off the electric current or to shift the belt and the car went beyond the travel limits into the overhead work.

From time to time the inspectors find these types of elevators still in use under such conditions. Instructions are immediately given to discontinue their use until they are placed in safe operating condition. The owners of such elevators tell the inspectors that they have never had an accident. But if their old employes are asked they can generally remember quite a few accidents. Names of at least one dozen companies can be mentioned who are making rope grip or jack power attachments to be applied to hand power elevators for the elevator owners who place price before safety. In order to hoist a load on this type of elevator it is necessary for the operator constantly to hold on to a check line which applies the grip wheels to the hand rope. There are no automatic stops on these machines and should some one draw the operator's attention in another direction so that he would forget to release his hold on check line, the car would continue upward into the overhead work.

For lowering the loaded or unloaded car it is not necessary to use any power as the car will slide or run by itself on releasing the brake. Of course, the heavier the load the greater speed the car will travel. There is not one out of a hundred who will ever stop to think of the large cast iron rope wheel in the overhead five or six feet in diameter, built especially for operating a hand power elevator by hand only. It is not a fly wheel; and by operating it with the rope grip attachment it is traveling far beyond its bursting capacity. If it were to break, it would probably cause a very bad accident.

New Elevator Installation.

A modern freight elevator had just been installed in an establishment and at all openings leading to hatchway the owner had provided an approved sliding fire door. These doors were located 14

inches from the hatchway but were without any locks. Any one could open the doors from any floor, allow the door to close and then stand in the 14 inches between the hatchway and the door. An elevator inspector had a very hard time to convince the owner of any danger from the condition and the reason for installing in addition to the fire doors, semiautomatic gates. The inspector continued with his inspection and was surprised when he ran the car down to find the owner standing at a lower floor in the 14 inches of room with his back to the closed door. As the car passed him, the platform pulled the buttons off his vest. This immediately convinced him that safety gates were necessary and he ordered his superintendent to have gates installed at once.

A serious elevator accident was prevented recently when an inspector was sent to inspect an elevator in a large office building as a result of an accident which had occurred only a few weeks before. The operator met his death by falling out of the car and then into the pit, a distance of about ten feet. It is thought that he started his car before closing the hatch door or that he fell over with a stroke. An inspector of this Department, decided that interlocks on the hatch doors and a collapsing gate on the car would have prevented this accident. If it was a stroke that killed the operator then the collapsing gate would have kept him in the car.

The Department inspector by a general inspection found two of the 30-inch overhead sheaves broken in four different places, and about ready to drop apart. There was no overhead grating to stop the falling pieces, and the trapdoor in the car top was missing. He was told by the janitor that it had not been in place for eight years. The inspector immediately shut the elevator down and danger signs were posted prohibiting its use.

AVOIDABLE ACCIDENTS.

Many serious and fatal accidents occur on elevators because of the practice of hoisting safety gates before the elevator reaches the floor. Recently in one of the manufacturing establishments of this State, the foreman was raising the elevator gate as the elevator was

coming down from the floor above. Before the elevator reached the floor on which this foreman was standing, another employe stepped up beside the foreman, lost his balance and fell twenty feet to the bottom of the elevator pit, fracturing his skull. His death resulted an hour later.

Suggestion: Elevator gates should never be hoisted until the elevator reaches the floor.

Neglect Causes Death.

An employe of a garage was washing an automobile. His clothes became soaking wet and instead of changing them, he allowed them to dry on his body with the result that he became sick. Pleurisy and pneumonia developed and his death resulted eight days later.

Unguarded Belts and Drunkenness Cause Death.

Recently in a large manufacturing plant an employe declared to be under the influence of liquor, walked into the motor room, started the motor and fell against an unguarded belt. Death came to him almost instantly.

No employe, under the influence of liquor, should be allowed in any manufacturing establishment. He is not only endangering his own safety but also that of all his fellow workmen.

Disregard of Safety Appliances Causes Death.

In one of our large industrial plants, ladders had been provided at each end of a building specifically for the purpose of reaching the cranes overhead. Instead of using these ladders an employe in ascending to a crane, used a ladder extended to a switch-board, then climbed through the girders and when only half way above the girders was struck by a crane. His death resulted from the injuries received.

In reply to an inquiry from the Department relative to what method had been adopted to prevent a recurrence of similar accidents, the company stated that the switch-board had been lowered to a point within easy access, thus doing away with the ladder in question and making it impossible for an employe to reach the crane girders overhead by means of such a ladder.

Insufficient Protection Causes Death of Employee.

An employe of a construction company was engaged in riveting steel girders on the thirteenth floor, when he slipped from the scaffolding and fell to the seventh floor. He was instantly killed.

Suggestion: In all construction work, each floor should be covered with substantial boards and the entire widths between supports or joists should be covered.

Repairing Moving Machinery—Death.

Recently at one of the plants in this State the governor belt broke and instead of having the engine stopped, and making the necessary repairs, it was operated and regulated by means of the steam valves. Later in the day an experienced repair man spliced the broken belt and was holding it with both hands preparatory to putting it on the pulley. The belt caught the set screw of the eccentric and wrapped around the shaft, thus pulling the workman against the guard rail of the engine and flywheel. The key of the strap connecting rod then caught in his clothing and pulled him over the guard into the engine, where he was badly mangled about the face and body. His death resulted almost instantly.

Suggestion: Do not make repairs while machinery is in motion.

Went Under Suspended Weight on Jack—Result Death.

The employe who was killed was engaged with three other fellow workmen in changing wheels on a car. In order to accomplish this work the car had been jacked up and the wheels removed. As the car was being lowered down on center, this man got under the car to guide the center pin into the hole in the center plate. The jack gave away and the car fell on him, killing him instantly.

In reply to an inquiry of the Department for the method to prevent a recurrence, this Department was advised that long tongs had been provided for the purpose of guiding these center pins. This will do away with the necessity of a workman going under the car while elevated and will prevent such an accident occurring in the future.

Two Fingers Lost as a Result of Disobedience to Safety Rules.

An employe of a steel company was engaged in putting on a housing cap by means of a crane when the cap caught on a cap-bolt. The injured workman placed his hand under the cap to adjust the bolt

when the craneman let all the weight off of the crane and the cap fell on the workman's hand cutting off two fingers and badly bruising the third.

In reply to an inquiry of the Department for the method to prevent a reoccurrence, the following reply was received:

"When the cap caught on the bolt, the man took hold of the bolt and gave it a jerk, bringing it in line with the hole and pulling down the cap on his hand. By this method, he disobeyed the rules which have been in effect at this plant for at least ten years. This rule is plainly printed in the Safety Rule Book which is published in four languages. The rule is also posted in at least two hundred points throughout the works on large enameled signs. This rule warns men to keep out from under lifts held by cranes or suspended in any other manner. Tongs are furnished and men are ordered to use them in such cases as this where it is necessary to reach under lifts. Tongs were near when the above accident occurred but the injured man preferred to 'take a chance' rather than go to the trouble of picking up tongs. The only possible means of preventing such accidents is the proper attention and obedience to the Safety Rules and Regulations which are in force. We gave all the publicity possible in the above case, using it as a warning to the balance of our men."

Neglect of Wound—Blood Poisoning Set In.

An employe engaged in assisting in lining a cupola was injured by a block brick falling ten feet and striking him on the foot. A day or two previous his foot was burned by a splash of hot metal, owing to the fact that he wore laced shoes instead of proper foundry shoes. He did not report the injury from the burn and the bruise of the wound from the falling brick caused infection. Although the foot was amputated later, gangrene had set in to such an extent that death resulted within two weeks.

At another manufacturing establishment, an employe while engaged in cleaning pipe, stepped in between the pipes and received a laceration and abrasion of the skin. Instead of reporting the injury and having it treated he continued to work and the constant rubbing of his clothing over the wound kept it irritated. In time blood poisoning developed and his death resulted seven days later.

Suggestion: Do not fail to report all minor injuries and have them properly attended to.

TIMELY HINTS FOR TINNERS.

A Little Thought Often Prevents Sickness or Injury. Is Your Job Worth "A Little Thought?"

Handle carefully all metal with sharp edges. Slight cuts and scratches occurring while at work are often neglected and have many times caused blood poisoning.

If you cannot apply a dressing that is absolutely clean, have all wounds dressed by your doctor. A dirty rag cannot be considered "first aid." It is very much more dangerous than no aid at all.

Wear clothing that will protect you from stormy weather and save yourself from colds and other more serious sicknesses.

Handle all solder carefully as it contains a large amount of lead. Lead poisoning may make you an invalid for life. Prevent it by keeping lead out of your system. Lead dust in the air is breathed into the lungs. Lead on your hands or lips is carried to the stomach when you eat. Do not breathe solder dust and always wash your hands and face thoroughly before eating.

Do not use unsafe ladders. This means ladders placed so that they may slip, as well as defective ladders.

In working on roofs see that you have proper support. Don't take chances.

While looking out for your own safety, do not forget your fellow worker and the chance passer-by. Place all tools so that they cannot slide or be jarred from their positions. In the year 1914, there were 7,635 persons in Pennsylvania hurt by falling material, 55 of these being killed outright.

Avoid fires by preventing them. See that all soldering furnaces stand firmly so that they cannot be easily upset.

Always extinguish your gasoline torch if leaving it only for a minute. Some one may tamper with it, or you may be detained longer than you expect and the nearby woodwork be set on fire in your absence.

When leaving a job always take a look around to make sure that there is no danger of a fire being started by anything you have left behind.

Promote safety, guard health, protect property. Attention to these three things benefits you, helps your fellow workman, and serves your employer.

Just as another man's recklessness may injure you, so your thoughtlessness may injure your neighbor. Practice the Golden Rule.

TIMELY HINTS FOR THE PREVENTION OF FIRE.

Attention Employees, Employers, Building Owners! Which One of You Will be Responsible for the Next Fire in Your Town?

Can you afford to be out of a job for weeks or months? A fire in your work place may stop not only your own wages but also the income of the rest of your family.

Next to carefulness, cleanliness is the best way known of preventing fires.

Oily rags and waste and greasy lunch papers should be kept in metal containers.

Do not allow waste paper and scraps to gather about your machine or work place. Keep all rubbish in its place by cleaning up at least once a day and oftener if necessary.

Have all cans containing volatile, inflammable liquids, such as gasoline, benzine or other oils, tightly closed when not in actual use. A spark coming in contact with these liquids or with their vapors may cause a serious fire or an explosion.

See that no hot articles touch inflammable material. This means a makeshift paper shade on an electric light bulb, as well as hot ashes in a wooden box or against a frame partition.

Employers: Fires cause heavy losses due to interruption of business, even though the destruction of material and the damage to property are fully covered by insurance. Can you afford to take this additional risk?

Good housekeeping on your part encourages your employees in cleanliness.

Furnish metal containers for rubbish, and safety cans for all inflammable liquids, then compel their use.

Insist upon your cleaners doing their work well. Dust and refuse around and between steam coils and in out of way places mean more than simply untidiness, they are a big fire hazard.

Allow gas jets only on fixed brackets and at safe distances from combustible material.

See that loose electric wires are not hung over nails and are not in contact with any other metal. Inspect all wiring frequently to be sure that the insulation is in good condition. This is especially necessary where the wires enter the building or run through partition walls.

All circuits should be fused and not over fused.

Post "No Smoking" signs and enforce them absolutely. Your employees will respect you and your property if they understand that you are really in earnest in trying to prevent fires.

Building Owners: Besides loss of your property, a fire means loss of income, at least temporarily.

A stranger will not be so careful of your property as you will. If you are putting up buildings for others to occupy, make them as nearly fireproof as possible.

If buildings cannot be made fireproof you can at least cut out all unnecessary recesses and corners which are so often used only as catchalls for sweepings and other rubbish.

A sprinkler system is the best safeguard you can install. It should be tested frequently so that it will be in working order when needed. Care should be used in cold weather to keep it from freezing.

Inspect your buildings often and at times when your tenant does not expect you. See that fire extinguishers and other fire fighting apparatus are provided, that they are in working order and that several people in their vicinity know how to use them.

The probability of a fire occurring in any establishment is inversely proportional to the attention given to inspection for fire hazards—the more frequently you inspect your premises, the less chance there is for a fire to occur.

What would three dollars buy for you? If you have a family of five, what would fifteen dollars buy for them? Do you know that, whether they have property or not, every man, woman and child in Pennsylvania loses almost three dollars every year through fires that some one could have prevented?

There will be practically no fire loss when buildings are properly constructed. When fire fighting apparatus is accessible at all times, when premises are kept clean and tidy and when you and your neighbor and everybody else do away with carelessness.

TIMELY HINTS TO INDUSTRIAL WORKERS, ON CRAMPS.

Every time you move any part of your body—whether it is for work or for play—a little poison is formed in the muscles that have been used.

The water you drink enters the blood and in this way is taken to all parts of the body. It rids the muscles of the poisons they make by dissolving these poisons and carrying them away to be thrown off from the body by the bowels, the kidneys and the skin.

The harder you work, especially in hot weather, the more poisons are made in your muscles. If, however, you sweat enough, they can not do you much harm, for the skin will carry the greater part of them away in the sweat.

If the poisons are not carried away just about as fast as they are made *cramps* appear. So whatever checks sweating when the body is active is apt to cause cramps. Two things especially do this. They are, exposing the body to strong drafts and drinking very cold water.

Drafts. When sweating profusely, do not "cool off" by leaving your work and standing in a strong draft. Resting for the same length of time away from the breeze will cool you off without danger, as the sweat is checked slowly and the poisons are not suddenly locked in the body.

Riding on a street car without a coat acts in the same way. You may do it safely after you have cooled off a little, but to leave your work when much overheated, jump on a car and ride in a strong draft without wearing a coat is very unsafe.

Cold Water: When you sweat you lose water through the skin. You must drink more water to take the place of that you lose. Drinking very cold water when overheated cools the body so that sweating is stopped. This keeps the poisons in the body and is one of the very common causes of cramps.

Drink cool water but not cold water.

Drink a moderate amount of water at one time and drink often.

A bath every night will clean the day's dirt from your body, will make you sleep well and will leave your skin in good condition for the work it must do next day.

The man who "doesn't care" when his health is concerned, doesn't care whether he leaves a widow to support his fatherless children.

Under the compensation law you are looked after in case of accident, but not in case of sickness. Can you afford to lose time and pay your doctor too? A little thought will keep you out of danger.

TIMELY HINTS TO INDUSTRIAL WORKERS, ON HEAT STROKE AND HEAT EXHAUSTION.

What Causes Them—How to Know Them—What to Do for Them.

Causes: The causes of both heat stroke and heat exhaustion are the same. The most important of them are: Heat; moist, still air; general weakness; overwork; overeating; alcoholic drinks.

Symptoms: These causes act differently on different people. In some they bring on *Heat Exhaustion* which shows itself in some or all of the symptoms as given in the following order: Headache, dizziness, paleness, cold sweat, weakness, vomiting, partial unconsciousness, muttering delirium.

In other cases *Heat Stroke* takes place and the victims will show some of the symptoms found in this list: Headache, dizziness, thirst, bad temper, low spirits, vomiting, wild delirium, convulsions, unconsciousness, face red, skin hot and dry.

Remedies: If you are on hand when either of these accidents occurs don't stop to decide which one it is, for the first treatment for both is the same.

Send for a doctor at once.

Lay the man in a cool, shady place.

Keep him on his back with his head raised a little.

Loosen his clothing.

Give him a little cool water to sip.

When you have done this much make up your mind whether it is a case of heat exhaustion or of heat stroke for at this point the treatment of the two begins to differ. If it is *Heat Exhaustion*—

Rub his arms and legs gently.

Place hot water bottles close to his legs and body.

Stimulate him by giving him 30 drops of aromatic spirit of ammonia, and, if at hand, give him strong black coffee to drink.

If it is *Heat Stroke*—

Give him no stimulants at all.

Wrap small pieces of ice in a towel and lay it on his head.

If no ice is at hand lay a towel, wrung out of cold water, on his head and change it every few minutes.

Take off his clothes and cover him with a sheet. If you have no sheet, leave his underclothes on.

Rub his body, arms, and legs with pieces of ice.

If no ice is at hand, fill a watering pot with cold water, hold it three or four feet above his body and sprinkle him.

Do not use the ice or the cold water too long. The doctor should see these cases as soon as possible.

Avoid the bad effects of heat in summer—

By using no beer, whiskey nor other alcoholic drink.

By eating sparingly.

By not eating meat oftener than once a day.

By drinking plenty of cool water.

By bathing every day.

By ventilating your work place.

By stopping work as soon as you begin to feel sick, washing your face and chest with cold water, drinking cool water and resting.

FIRE ESCAPES.

Fire escapes should provide safe means of egress from a burning structure. A safe passage to the outside iron fire escape or stairs leading to the street is of almost equal importance with the stability of fire escape or stairs; a timid person will hesitate when about to pass the danger point and to hesitate is to be lost.

In schools, factories, apartments, halls, or any building where numbers of people are assembled or lodged, the law requires two separate and distinct means of escape to be provided, when the buildings are more than two stories high and in certain types of buildings more than one story in height; the exits, in all cases, leading to the street, to be located at opposite ends of the building. An important item to be considered, in locating these exits, is that they afford two means of egress not only from each floor, but from each room on each floor.

An unobstructed passage to the exits and the fireproofing of the doors and partitions leading to and inside of such passageway are matters to be seriously considered by all architects in preparing

drawings for new structures and remodeling old ones. The Act of Assembly, May 3rd, 1909, requires that plans for such structures be submitted in duplicate to the Department of Labor and Industry before the erection is begun. The requirements as to stairways, etc., are also covered by this act.

Many architects overlook the matter of providing two means of escape from apartments occupied by two or more families above the first floor. There is, usually, a front stairway used jointly by the two apartments and a rear stairway accessible only from the rear apartment; thus affording two means of egress for the occupants of the rear apartments and only one means of egress from the front apartment. The rear apartment being distinctly private, the family in the front of the building usually can not pass through the rooms of the other family.

It rarely happens, especially in a large building, that the entire building is in flames at one time, and presuming the interior stairs at one end of the building to be afire the occupants would naturally hasten in the opposite direction where there would be an outside iron fire escape. Now this escape should be of sufficient strength to withstand the strain which is about to be put upon it. Such fire escape is required by the safety standards of the Department of Labor and Industry to be wrought iron construction, built and erected to stand a load of eighty pounds to the square foot, the stairways limited to not less than six inch tread, two feet wide, with three feet high railings on stairs and landings.

Plans and specifications of Pennsylvania standard construction can be secured upon application to the Department of Labor and Industry at Harrisburg. On schools, factories, colleges and similar institutions where large numbers of persons, especially females and children, are assembled, the Department requires larger landings and wider stairs to suit conditions and avoid congestion. The greatest danger is not from the fire alone but from the liability of panic caused by fright which frequently results in loss of life.

Many public schools erected before the passage of the Act of Assembly, might have been constructed with interior fire tower stairs instead of the unsightly outside iron stairs.

The exit doors, leading to fire escapes, as well as all external doors should open outward and in fact all doors should open in the direction of the flow of people from the exits. The reader of this bulletin will readily understand the necessity for this as well as for the panic bolts on exit doors of halls and theatres, and buildings where fifty or more persons are congregated.

The requirements of the Department of Labor and Industry relative to construction, aisles, exits, seating, etc., in motion picture theatres are very stringent.

The safest construction of fire escapes from buildings is the vestibule type of fire tower stairs with fire proof door in the opening from main room to vestibule, and fire proof door in the opening from vestibule to stairs. A smoke proof tower eliminates danger and the occupants of the building can pass out in safety. Of course there should be separate towers at opposite ends of a building with safe passageways to both towers for all occupants of the building. It is essential, therefore, that the various floors of the building be unobstructed by division walls and partitions which would hinder the rapid flow of people to these towers.

Summing up the above facts, the result is: "Safety in construction is the best policy."

SAFEGUARDING WORKERS IN QUARRIES.

Among the various industries of the State the quarry is undoubtedly one of the most hazardous. The problem of properly safeguarding the workers in quarries is one requiring considerable thought and action.

Especial precautions are necessary in the handling of explosives and no employe should handle dynamite or other high explosives, nor assist in handling them, unless he has received thorough instructions, from some experienced person.

A special storehouse or magazine should be provided and located in a safe place and constantly kept under lock and key and in charge of one particular person thoroughly experienced in the use and the handling of explosives.

The loading and the firing of the holes should be carefully done and the use of iron or steel rods for tamping should not be permitted under any circumstances. Only wooden or copper rods should be used. When the holes are ready to be fired, the foreman should use the utmost care in seeing that all workmen are out of the danger zone, and a perfect set of signals, with which all the employes should be familiar, is essential. Usually the whistle is used as a signal and sufficient time should be given, after the signal to shoot has been blown, for the men to reach a point of safety.

In many quarries shelters or barricades have been provided to protect the men from flying rocks and smaller stones and the use of these shelters should be insisted upon and failure on the part of any employe to use them should cause immediate dismissal. Reports have been received of serious accidents, several fatal, that

have resulted from failure to use the protections provided and too much stress can not be laid on this point in safety work at quarries. After the blast, sufficient time should elapse before the men are allowed to return to their work for it often follows that all the charges do not go off; a delayed charge or blast has often caused loss of life. Many authorities contend that in case of a blast missing fire, no one should go near the place for at least two hours and it is safer to stay away for a day. Under no circumstances should an attempt be made to remove an old charge. A new hole should be drilled and a new shot fired.

Another danger is the loose rock, soil and overhanging ledges which often fall without the least sign of warning and many lives have been crushed out from this cause. To eliminate this danger and the danger from the same source, due to sudden thaw, careful inspection should be made each day of the sides or face of the quarry and all loose rocks, should be removed before men are permitted to begin work. The foreman should be especially cautious and not permit the men to undercut the rock and wherever possible they should work from above. The need of this precaution is best illustrated in the report of an accident recently received at this Department. An employe in a large quarry, located in Northampton county, was breaking stone and undercut the pile he was working on, when a fall occurred and a large stone rolled down the bank and crushed him to death.

The use of the safety belt is strongly urged, when it is necessary for the men to work at an elevation on the side or face of the quarry.

All machinery should be properly guarded and careful inspection should be made of the hoisting at least every few days for very often an apparently new cable will give way.

One of the most valuable assets in the safety of an industry is a conscientious, capable foreman or superintendent and an up-to-date, active, efficient safety organization.

EFFORTS TO PREVENT OVERCROWDING IN THEATRE LOBBIES.

Co-operation of every borough and city of more than 1,000 population in Pennsylvania is being requested by the Department of Labor and Industry, to prevent overcrowded lobbies and standing spaces in motion picture houses and the placing of signs and other obstructions in the entrances.

Complaints have been made to the Labor Department against these conditions which would greatly increase danger in case of panic. Copies of a specimen ordinance are being sent to boroughs and cities all over the State which, if passed by the councilmanic bodies, will bring the dangerous conditions under local police control as co-operative with the Labor Department.

The specimen ordinance, which is being sent out from the Division of Municipal Statistics, includes in its regulations theatres, opera houses and other buildings used for public assemblage in addition to motion picture houses. Penalties fixed in the ordinance vary from \$25, for the first offense, to \$50, or thirty days imprisonment, or both, for the second offense. The specimen ordinance submitted to the municipalities is as follows:

An Ordinance

Making regulations for theatres, opera houses, motion picture theatres, or other buildings used for public assemblage, and providing penalties for the violation thereof.

Section 1. Be it ordained by the City of and it is hereby ordained with the authority of the same, that from and after the passage of this ordinance, it shall be unlawful for the owner, lessee, agent or manager of any theatre, opera house, motion picture theatre, or other building used for public assemblages, to permit persons to stand in the place reserved for standing room, which shall be directly behind the last row of seats, to a greater number than twenty per cent of the seating capacity of the main floor of such theatre, opera house, motion picture theatre, or other building used for public assemblages, and that not less than three square feet of floor space shall be allowed each person, and there shall at all times be maintained a passageway of not less than five feet in the clear between the foyer wall and the standing space and an independent exit must be available for such standing space, and notice shall be posted setting forth the number of persons permitted to stand, in accordance with this section, and the number so permitted shall not be exceeded, and no person shall be allowed to stand in any aisles except the regular employes of such theatre, opera house, motion picture theatre, or other building used for public assemblages, nor shall any person be allowed to stand in the lobby or entrance corridor of such theatre, opera house, motion picture theatre, or other building used for public assemblages, in such manner as to obstruct any doorway used as an entrance or exit.

Section 2. In every theatre, opera house, motion picture theatre, or other building used for public assemblages, the lobby, or entrance corridor, shall be kept free at all times from any easel, or obstruction of any kind, except that advertising pictures or lithographs may be hung on the wall of such lobby or entrance corridor in permanent frames, providing the same shall not project more than six inches in the lobby or entrance corridor; in addition unframed lithographs or banners may be suspended from above, but the lower edges of such unframed lithographs or banners shall not come within seven feet of the floor of the lobby or entrance corridor.

Section 3. The manager, or person in charge, shall be held responsible for the violation of any of the provisions of this ordinance and it shall be the duty of such manager, or person in charge, when all seats or standing space is occupied, to stop the sale of tickets until such time as other seats or standing room is available. But in no case shall the number of tickets sold exceed the number of persons who can be accommodated in seats or standing room, as heretofore specified.

Section 4. It is hereby made the duty of the proper police authorities of the borough to properly enforce the provisions of this ordinance.

Section 5. Any person or persons violating any of the provisions of this ordinance shall upon conviction thereof before the burgess, or any justice of the peace, be punished by a fine of not less than twenty-five dollars for the first offense, and not less than fifty dollars, or thirty days' imprisonment, or both, for the second offense.

Section 6. All ordinances or parts of ordinances inconsistent herewith be and the same are hereby repealed.

THE COMMONWEALTH FOR "SAFETY FIRST."

The Commonwealth of Pennsylvania will set an example to every industrial establishment within the State by forming an organization for "Safety First" among its department heads and employes located in all sections of the Commonwealth.

This new movement for safety will extend to all institutions controlled by the State, to all contract work under State supervision and to every organization or establishment where the State exer-

cises control. It is the outgrowth of the Industrial Accident Prevention Conference held in Harrisburg, March 23, at which representatives of capital and labor met with State officials and declared, in resolutions, that safety organizations should be formed in every industry.

That conference was called by Governor Brumbaugh following information from Commissioner John Price Jackson, of the Department of Labor and Industry, that if accidents continue to occur throughout the year, at the rate reports indicated during the first two months, 300,000 workers would be injured and 2,500 killed before the end of 1916, in Pennsylvania alone.

The State Safety Organization will include as an advisory committee, with the Governor, the following department heads: Samuel B. Rambo, Superintendent of Public Grounds and Buildings; Dr. Samuel G. Dixon, Commissioner of Health; Charles D. Wolfe, Acting State Fire Marshal; Bromley Wharton, Secretary of Board of Public Charities; Nathan C. Schaeffer, Superintendent of Public Instruction, the Highway Commissioner and John Price Jackson, Commissioner of Labor and Industry.

Governor Brumbaugh has sent the following letter to each of those department officials as the first step in forming the State's Safety Organization:

"As you are probably aware, the number of accidents resulting in injuries to workers in Pennsylvania is appalling. It unquestionably behooves every governmental official to use every effort and influence to aid in reducing this tremendous loss.

"The consensus of opinion, expressed by leaders of industry, heads of great labor organizations and government officials, attending the Industrial Accident Prevention Conference, which I called in Harrisburg, March 23, was that every employer should develop in his works an efficient safety organization headed by the chief administering officer and including representatives from the employees. This thought was formally expressed in resolutions adopted by the members of the conference.

"Since this safety plan was so unanimously endorsed by these practical men of large affairs I feel that it is my duty, as the chief official of administration of our State organization, to follow the thought of that meeting and have the Commonwealth of Pennsylvania set an example for the industrial world by organizing a safety organization within the departments.

"The first step in this activity as I conceive it, is to name the heads of the various departments who can be of particular service in this work and aid me as an advisory safety committee. I therefore, now appoint you a member of such committee. Associated with you will be the State officials named on the list accompanying this letter.

"The steps to follow this preliminary one can be taken up at the meeting of the advisory committee, but I merely suggest tentatively that you will probably desire as your second step to name a thoroughly equipped working committee of experts attached to the departments of the State to handle the details of the safety work throughout the State institutions and organizations.

"A third step may be the creation of suitable local safety organizations for each individual institution or organization working in conjunction with central organization in Harrisburg.

"I hope that you will accept this appointment and give the work as much of your time as you can possibly devote to it by reason of its serious importance."

ENFORCING THE "PURE MATTRESS LAW."

Thousands of mattresses, offered for sale in various sections of Pennsylvania, have been condemned by inspectors of the Department of Labor and Industry in the campaign instituted to enforce the "pure mattress law" passed by the Legislature. Prosecutions for flagrant violations have been instituted and fines have been imposed.

The inspection of mattresses, offered for sale, has been conducted under the direct supervision of the Division of Hygiene and Engineering of the Labor Department.

In the Pittsburgh district alone 39,514 mattresses, offered for sale in violation of the act, were discovered. Of these mattresses, 25,000 were not properly tagged, 13,168 contained material prohibited by law and 1,346 were secondhand mattresses.

Inspectors of the Department have discovered that the tremendous demand for cotton and similar material in the manufacture of ammunition for the European war has caused a dearth of material suitable for filling mattresses of the cheaper grades. Some manufacturers claim that this lack of material has been responsible for many of the violations of the law.

It has also been found that many mattresses, not conforming to the Pennsylvania Law, are being shipped into Pennsylvania from factories in adjoining States. Several carloads of mattresses have been condemned before they were unloaded.

Mattresses must be manufactured of approved material thoroughly sterilized and disinfected. A secondhand mattress may not be sold unless it has been sterilized by an approved method and a mattress that has been used by a person having any contagious or infectious disease may not be resold under any conditions. Every mattress offered for sale must have securely sewed to its cover, a linen or muslin tag not less than 3 x 4½ inches in size and bearing the name of the manufacturer and vendor as well as a complete description of the contents of the mattress. Shoddy may not be used in any mattress.

The campaign to enforce the "pure mattress law" is being waged in all sections of the State and will be continuous to prevent the spread of contagious or infectious diseases by the sale of contaminated mattresses.

ESTABLISHMENT OF VOCATIONAL DISEASE CLINIC ANNOUNCED AT SECOND CONFERENCE OF PHYSICIANS ON INDUSTRIAL DISEASES.

A clinic for the study of industrial diseases exclusively is to be established in Philadelphia by the co-operative effort of Dr. Alfred Stengel, Professor of Medicine, University of Pennsylvania, Commissioner John Price Jackson and Dr. Francis D. Patterson, Chief of the Division of Industrial Hygiene and Engineering, of the Department of Labor and Industry.

That announcement was made May 18, to the several hundred physicians and surgeons from all sections of Pennsylvania attending the second conference on industrial diseases and accidents held at the State Capitol by the Hygiene Division of the Labor Department.

This clinic, which is virtually the first of its kind, will be established with Dr. Stengel at its head, at the University of Pennsylvania Hospital in Philadelphia shortly after June 1. An entire hospital ward will be devoted to sufferers from diseases presumed to be contracted in their employment and from conditions under

which they work. Two physicians of the hospital and a score of social service workers will assist Dr. Stengel in his study of the cases and exploration of the field of vocational diseases which medical experts declare has never before been thoroughly investigated.

The studies and clinics will attract physicians and surgeons, interested in vocational diseases and treatment of unusual industrial accident cases, in the entire eastern section of the country. The findings of the clinic and its investigations will have a direct relation to Workmen's Compensation as already the Compensation Board has been called upon to decide whether some afflicted workers have been injured in their employment within the meaning of the act or whether they are suffering from diseases not subject to compensation.

Commissioner Jackson will notify, by letter, Pennsylvania industrial plants of the creation of the clinic with the information that it is open to workers suffering from ailments peculiar to their trades. It is probable that other clinics of a similar nature will be founded in other sections of the State by co-operation of eminent physicians and surgeons with the Labor Department. The whole field of diseases caused by employment will be investigated. At the present time it is conceded that there are few specific industrial diseases known to originate definitely from vocational causes. Conspicuous among these are lead poisoning and poisoning by other metals and caisson disease or "the bends" suffered by workers in water-tight chambers at high atmospheric pressure.

Other broad fields for investigation, by the clinics, will include diseases caused by dusts in open air work as well as in confined places. Studies will be made to determine the effects of dust in woolen and textile mills, in mines, in cement mills, in flour and cereal mills and even among road workers and threshermen.

Conference Program.

The program of the conference held at the Capitol was as follows:

Morning Session.

Dr. Francis D. Patterson, Presiding Officer.

Address of Welcome, Commissioner John Price Jackson.

"The Relation of Extreme Temperatures to the Efficiency of the Workman."

Dr. Alfred Stengel, University of Pennsylvania.

Discussion, Opened by Dr. J. W. Schereschewsky, United States Public Health Service.

"The Mortality From Diseases of the Lungs in American Industry," Frederick S. Crum, Ph. D., Prudential Insurance Co., of America.

Discussion, Opened by Dr. Elizabeth B. Bricker, Department of Labor and Industry.

Afternoon Session.

"The Value of Physical Examination as a Factor in the Prevention of Industrial Injury," Dr. John B. Lowman, The Cambria Steel Co.

Discussion, Opened by Dr. J. W. Luther, New Jersey Zinc Co.

"What Constitutes 'Reasonable' Surgical, Medical and Hospital Services Under the Compensation Act," Dr. J. M. Baldy, Bureau of Medical Education and Licensure.

Discussion, Opened by Dr. Randolph Zimmerman, Westinghouse Air Brake Co.

"Inguinal Hernia; Viewed as an Anatomical Defect," Dr. Charles A. Laufer, Westinghouse and Electric Manufacturing Company.

Discussion, Opened by Dr. Wm. O'Neil Sherman, Carnegie Steel Co.

MEDICAL VIEWPOINT ON HEALTH INSURANCE TO BE OBTAINED.

The opinion of the medical profession, on health insurance, will be obtained by Commissioner John Price Jackson of the Department of Labor and Industry according to an announcement made at the conference of physicians on industrial diseases. A committee of eminent physicians and surgeons in Pennsylvania will be requested to prepare a report on the advantages or disadvantages of health insurance as viewed from the attitude of the medical profession.

Another committee of surgeons will be requested to draw up a report designating what, in their opinion, constitutes a major and a minor operation under the meaning of the Workmen's Compensation Act.

The act stipulates that the maximum remuneration for a physician performing a minor operation, on an industrial accident victim shall be \$25, and for a major operation the maximum charge may be \$75.

Physicians Attending Conference.

Physicians and surgeons attending the conference included:

Name.	Company.	Address.
H. McSanass, ...	United Gas Imp. Co., ...	Hamburg, Pa.
Jos. McIver, ...	Pittsburgh Steel Products Co., ...	Philadelphia, Pa.
J. C. Devenney, ...	Pine Hill Coal Co., ...	Harrisburg, Pa.
D. E. Sloane, ...	Pittsburgh & Lake Erie R. R. Co., ...	Charleroi, Pa.
E. L. Straub, ...	Heppenstall Forge Co., ...	Minersville, Pa.
John D. Milligan, ...	Central Steel Co., ...	Pittsburgh, Pa.
S. H. Johnson, ...	Eastern Steel Co., P. & R. C. & I. Co., ...	Pittsburgh, Pa.
J. A. Carnes, ...	Winchester Repeating Arms Co., ...	Massillon, O.
J. B. Rogers, ...	Carpenter Steel Co., ...	Pottsville, Pa.
Wm. T. Merrill, ...	Bethlehem Steel Co., ...	New Haven, Conn.
Charles P. Henry, ...	American Car & Foundry Co., ...	Reading, Pa.
Loyal A. Shoudy, ...	Delaware & Hudson R. R., ...	Bethlehem, Pa.
George C. Davis, ...	Hershey Chocolate Co., ...	Milton, Pa.
Jno. S. Niles, ...	Am. Academy of Medicine, ...	Carbondale, Pa.
J. L. Zimmerman, ...	Bureau of Medical Education and Licensure, ...	Hershey, Pa.
J. B. McAllister, ...	American Steel & Wire Co., ...	Harrisburg, Pa.
Adolph Koenig, ...	Dept. Labor & Industry, ...	Pittsburgh, Pa.
R. V. Swanton, ...	Essex Rubber Co., ...	Pittsburgh, Pa.
Alfred Stengel, ...	Jones & Laughlin, ...	Philadelphia, Pa.
F. G. Scammell, ...	N. Y. Central R. R. Co., ...	Trenton, N. J.
Charles Duffey, ...	Carnegie Steel Co., ...	Pittsburgh, Pa.
C. H. Smith, ...	National Tube Co., ...	Lingestown, Pa.
Wm. V. McLeod, ...	Tunnel Coaling Co., Pennsylvania Coal and Coke Corp., ...	New York, N. Y.
A. W. Colcord, ...	U. S. Public Health Service, ...	Clairton, Pa.
G. L. Hays, ...	Globe Indemnity Co. of N. Y., ...	Pittsburgh, Pa.
F. U. Ferguson, ...	Penna. Coal & Coke Corp., Nanty-Glo Coal Mining Co., Springfield Coal Mining Co., Tunnel Coaling Co., Lincoln Coal Co., ...	Huntingdon, Pa.
J. W. Schereschewsky, ...	Penna. Railroad, ...	Byrnedale, Pa.
G. G. Harman, ...	H. K. Mulford Co., ...	Amber, Pa.
S. E. Hayes, ...	Employers Mutual Ins. Co., ...	Washington, D. C.
George Robinson, ...	P. & R. C. & I. Co., ...	
Robt. U. Patterson, ...	Union Carbide Co., ...	
Judson C. Fisher, ...	D. L. & W. R. R. Co., ...	
J. Walter Barr, ...	Spang, Chalfant & Co., Inc., ...	
J. B. Hileman, ...	General Electric Co., ...	
Thos. W. Jackson, ...	Consolidated Coke Co., ...	
William Schroeder, Jr., ...	Bureau of Medical Education and Licensure, ...	
G. A. Zimmerman, ...	Travelers Ins. Co., ...	
G. H. Halberstadt, ...	Kingston Coal Co., ...	
J. P. Jones, ...	Lehigh & Wilkes-Barre Coal Co., ...	
J. M. Wainwright, ...	Pine Hill & Oak Hill Coal Co., P. & R. Coal Co., ...	
A. C. Gibson, ...	Dill & Collins Paper Mill, ...	
D. VanDerwart, ...	United Gas Improvement Co., ...	
L. H. Seaton, ...	Aetna Life Insurance Co., ...	
Irvin D. Metzger, ...	Harvey F. Smith, ...	
A. R. Tilton, ...	David Jos. Hetrick, ...	
J. Treichler Butz, ...	W. Collins, ...	
D. H. Lake, ...	Sidney McCurdy, ...	
James W. Geist, ...	C. W. Eisenhower, ...	
T. J. McGurl, ...	W. T. James, ...	
C. N. Sturtevant, ...	H. E. Klase, ...	
James B. Douglas, ...		
C. H. Harbaugh, ...		
Harvey F. Smith, ...		
David Jos. Hetrick, ...		
W. Collins, ...		
Sidney McCurdy, ...		
C. W. Eisenhower, ...		
W. T. James, ...		
H. E. Klase, ...		

Physicians and Surgeons Attending Conference—Continued.

Name.	Company.	Address.
W. M. Condon, ...	Harrisburg Hospital, ...	Harrisburg, Pa.
H. B. Walter, .....	.....	Harrisburg, Pa.
S. H. Scott, ...	American Bridge Co., American Sheet & Tin Plate Co.	Coatesville, Pa. Pittsburg, Pa.
Marion Ulrieb, .....	.....	Millersburg, Pa.
G. E. Dietrich, ...	Worth Bros. Co., ...	Coatesville, Pa.
Geo. D. Morton, ...	Penna. R. R., ...	Honey Brook, Pa.
John H. Bennett, ...	Dept. of Public Safety, ...	York, Pa.
Jackson Taylor, ...	Lukeus Iron & Steel Co., ...	Coatesville, Pa.
Frank V. McConkey, .....	.....	York, Pa.
Caspar Morris, ...	Reading R. R., ...	Philadelphia, Pa.
C. A. Lauffer, ...	Westinghouse Electric & Mfg. Co., ...	E. Pittsburgh, Pa.
W. H. Hartzell, ...	Lehigh Valley Transit Co., ...	Allentown, Pa.
D. P. Maddux, .....	.....	Chester, Pa.
J. P. Van Keuren, ...	Robt. Wetherill & Co., Inc., ...	Chester, Pa.
Joseph Fleitas, ...	Link-Belt Co., ...	Philadelphia, Pa.
Harold S. Broomall, ...	Surpass Leather Co., ...	Philadelphia, Pa.
Jno. J. Singer, ...	Keystone Coal & Coke Co., ...	Greensburg, Pa.
George O. Evans, ...	Oliver & Snyder Steel Co., ...	Pittsburgh, Pa.
John C. Cope, ...	H. C. Frick Coke Co., Jamison Coal and Coke Co.	Greensburg, Pa.
Gilbert L. Dailey, ...	Harrisburg Pipe and Pipe Bending Co., ...	Harrisburg, Pa.
J. B. Lowman, ...	Cambria Steel Co. & Lorain Steel Co., ...	Johnstown, Pa.
J. McF. Eaton, ...	Mgr. Welfare Dept., Cadillac Motor Car Co.	Detroit, Mich.
E. H. Hanna, ...	Cadillac Motor Car Co., ...	Detroit, Mich.
Stillwell C. Burns, ...	Baldwin Locomotive Works, ...	Philadelphia, Pa.
J. M. Baldy, ...	Bureau of Med. Education and Licensure, ...	Philadelphia, Pa.
C. C. Stauffer, .....	.....	Harrisburg, Pa.
W. S. Russell, .....	.....	Steelton, Pa.
James E. Dickinson, ...	Penn. Steel Company, ...	Harrisburg, Pa.
E. R. Whipple, .....	.....	Steelton, Pa.
David S. Funk, .....	.....	Harrisburg, Pa.
Karl Schaffle, .....	.....	New Cumberland, Pa.
C. A. Barron, ...	Quaker City Rubber Co., ...	Philadelphia, Pa.
Joseph A. Lafferty, ...	Fort Pitt Malleable Iron Co., ...	Pittsburgh, Pa.
John Bailey, ...	The Bell Telephone Co., ...	Ridley Park, Pa.
H. A. Sbafter, .....	.....	Williamstown, Pa.
T. John Bowes, ...	Philadelphia Electric Co., ...	Philadelphia, Pa.
Jesse E. Ambler, ...	The Pittsburgh Plate Glass Co., ...	Pittsburgh, Pa.
R. P. Cummins, ...	Midvale Steel Co., ...	Philadelphia, Pa.
E. H. McIlvain, ...	Edw. G. Budd Mfg. Co., ...	Philadelphia, Pa.
C. L. Stevens, ...	Penna. Medical Journal, ...	Philadelphia, Pa.
Joseph Coben, ...	American Car & Foundry Co., ...	Athens, Pa.
T. Grier Miller, ...	Univ. of Pa., Occup. & Ind. Clinic, ...	Berwick, Pa.
Cbas. H. Pike, ...	Harrison Bros. & Co., Inc., ...	Philadelphia, Pa.
A. P. Wetherill, ...	Wetherill & Brother, ...	Philadelphia, Pa.
William A. Lucas, ...	Western Electric Company, ...	Oak Park, Ill.
Mrs. Samuel Semple, ...	Industrial Board, Dept. Labor & Industry, ..	Titusville, Pa.
Wm. S. White, ...	Marshall Field & Co., ...	Chicago, Ill.
Harry E. Mock, ...	Sears Roebuck & Co., ...	Chicago, Ill.
A. J. Menny, ...	Draeger Oxygen App. Co., ...	Pittsburgh, Pa.
J. L. Murrie, ...	New York Edison Co., ...	New York, N. Y.
M. Fridolf Jacobson, ...	Am. Mutual Liability Ins. Co., ...	Boston, Mass.
T. J. McGurl, ...	Pine Hill Coal Co., ...	Minersville, Pa.
Wm. S. Higbee, ...	Penna. Salt Mfg. Co., ...	Philadelphia, Pa.
H. S. Kinne, ...	J. K. Mosser Co. (Branch of Armour Co.), ..	Williamsport, Pa.
D. B. Traver, .....	.....	Steelton, Pa.
R. W. Chaffee, ...	The Smet-Solvay Process Co., ...	Syracuse, N. Y.
Geo. A. Merkel, ...	Susquehanna Coal Co., Lehigh Valley Coal Co.	Minersville, Pa.
C. M. Sullivan, .....	.....	Harrisburg, Pa.
E. W. Keith, ...	P. & R. C. & I. Co., Pine Hill Coal Co., Oaksfield Coal Co.	Minersville, Pa.
B. B. Jeffers, .....	.....	Steelton, Pa.
E. L. Walmer, .....	.....	Harrisburg, Pa.
Wm. Tyler Douglass, ...	Polyclinic Hospital, ...	Harrisburg, Pa.
Chas. S. Rebeck, ...	P. R. R. Eye Surgeon, ...	Harrisburg, Pa.
C. Shultz, ...	Montour Co. Med. Society, ...	Danville, Pa.
Randall Zimmerman, ...	Westinghouse Air Brake, ...	Wilmerding, Pa.
W. T. Williams, ...	Lehigh Valley Coal Co., Lehigh Valley R. R. Co., Pennsylvania Railroad Co.	Mt. Carmel, Pa.
William T. Bishop, ...	Dauphin Co. Medical Soc., ...	211 Pine St., Harri- burg, Pa.
E. A. Graves, ...	Coatesville Boiler Works, Coatesville Mach- ine Co.	Coatesville, Pa.
J. W. Ellenberger, ...	J. Horace McFarland Co., Harrisburg Shoe Man. Co.	Harrisburg, Pa.
E. A. Curry, ...	Montour Co. Medical Soc., ...	Danville, Pa.
J. Jacob Schoening, ...	John B. Stetson Co., ...	Philadelphia, Pa.

Physicians and Surgeons Attending Conference—Continued.

Name.	Company.	Address.
C. T. Graham-Rogers, ...	New York Industrial Commission, ...	New York.
J. Clinton Foltz, ...	American Pulley Co., ...	Philadelphia, Pa.
L. G. Shrom, ...	Joseph Horne Co., ...	Pittsburgh, Pa.
H. McGowan, .....	.....	Harrisburg, Pa.
A. J. Ritzman, .....	.....	Harrisburg, Pa.
Park A. Deckard, .....	.....	Harrisburg, Pa.
John F. Culp, .....	.....	Harrisburg, Pa.
Fannie R. Steese, .....	.....	Harrisburg, Pa.
George K. Strode, .....	.....	Harrisburg, Pa.
Frank F. D. Reckord, ...	State Department of Health, ...	Harrisburg, Pa.
Sidney J. Repplier, ...	Curtis Publishing Co., ...	Philadelphia, Pa.
Alfred P. Isenberg, ...	Pennsylvania Railroad Co., ...	Harrisburg, Pa.
George A. Stock, .....	.....	Danville, Pa.
H. F. Gross, ...	Harrisburg Polyclinic Hospital, ...	Harrisburg, Pa.
C. R. Phillips, ...	American Academy Medicine, ...	Harrisburg, Pa.
L. M. Shumaker, .....	.....	Harrisburg, Pa.
Walter H. Blakeslee, ...	Dept. of Labor and Industry, ...	Philadelphia, Pa.
G. M. Coates, ...	Wetherill & Brother, ...	Philadelphia, Pa.
F. A. Newcomb, ...	J. T. Lewis & Bros. Co., ...	Philadelphia, Pa.
John J. Mallowney, ...	State Dept. of Health, ...	Harrisburg, Pa.
C. F. Kirkendall, ...	H. K. Mulford & Co., ...	New York, N. Y.
W. M. Holtz, ...	Pittsburgh Railways Co., Duquesne Light Co., ...	Pittsburgh, Pa.
Frank D. Kilgore, .....	.....	Harrisburg, Pa.
F. S. Peterkin, ...	Westinghouse Elec. & Mfg. Co., ...	E. Pittsburgh, Pa.
Dorothy Child, ...	Student, ...	Philadelphia, Pa.
E. H. Ingram, ...	Wm. Cramp & Sons S. & E. B. Co., American Engineering Co., ...	Philadelphia, Pa.
Wm. B. Scull, ...	Jno. T. Lewis & Bro. Co., Electric Storage Battery Co., ...	Philadelphia, Pa.
Henry Field Smyth, ...	Dept. Hygiene, Univ. of Pennsylvania, ...	Wayne, Pa.
Herman F. Sempfner, .....	.....	New York, N. Y.
A. T. Gaillard, ...	Travelers Insurance Co., ...	Hartford, Conn.
H. P. Hourigan, ...	Larkin Co., ...	Buffalo, N. Y.
Wm. C. Minnich, ...	Pressed Steel Car Co., ...	McKees Rocks, Pa.
C. S. Apgar, ...	Armstrong Cork Co., ...	Pittsburgh, Pa.
Ralph Nauss, .....	.....	Greenville, Ohio.
G. M. Dickinson, ...	United Coal Co., ...	Adamsburg, Pa.
W. D. Farber, ...	Lawrence Portland Cement Co., ...	Northampton, Pa.
J. M. Maurer, ...	Susquebanna Coal Co., ...	Shamokin, Pa.
G. M. Stites, ...	Susquebanna Coal Co., ...	Williamstown, Pa.
Frederick S. Crum, ...	The Prudential Ins. Co., ...	Newark, N. J.
James M. Booher, ...	Life Saving Devices Co., ...	Chicago, Ill.
S. N. Fowler, ...	Life Saving Devices Co., ...	New York, N. Y.
Alfred C. Marshall, ...	Powers-Weightman-Rosengarten Co., ...	Philadelphia, Pa.
Russell Sage Boles, .....	.....	Philadelphia, Pa.
H. L. Grazier, ...	Jones & Laughlin, ...	Woodlawn, Pa.
H. E. McGuire, ...	Jones & Laughlin, ...	Pittsburgh, Pa.
J. L. Christian, ...	Connell Anthracite Mining Co., ...	Lopez, Pa.
John Woodman, ...	N. Y. Edison Co., ...	New York, N. Y.
Edward N. Hagin, ...	Sharon Steel Hoop Co., American Steel Foundry Co., ...	Sharon, Pa.
W. O. Keffer, ...	The Eastern Bituminous Coal & Coke Co., Van Ormer Coal & Coke Co., ...	Frugality, Pa.
C. L. Johnstonbaugh, ...	Bureau of Medical Education & Licensure, ...	Bethlehem, Pa.
John W. Luther, ...	New Jersey Zinc Co., ...	Palmerton, Pa.
J. H. Young, ...	Lehigh Coal & Navigation Co., ...	Lansford, Pa.
S. P. Mengel, ...	L. V. Coal Co., ...	Wilkes-Barre, Pa.
F. L. Grossman, ...	The Travelers Ins. Co., ...	Hartford, Conn.

EMERGENCY DISPENSARIES OF INDUSTRIAL PLANTS.

Prompt treatment of injuries sustained by workers in industrial plants frequently has direct bearing on compensation payments for each injury as well as on the amount of suffering that the victim may endure following the accident.

Great industrial plants realize to-day that the principles underlying the establishment of dispensaries are both economic and humanitarian. Elsewhere, in this Bulletin, are reproductions of photographs of the dispensary and connected waiting room of the J. G. Brill Company in Philadelphia. These rooms are equipped with all type of first-aid equipment and wound dressings. The rooms are approximately 16 feet long and 14 feet wide.

The Department of Labor and Industry is collecting photographs of modern dispensaries installed in connection with industrial establishments. Copies of photographs of such dispensaries will be appreciated if mailed to Commissioner John Price Jackson of the Department of Labor and Industry, Harrisburg, Pa.

ENLARGEMENT OF CENTRAL EMPLOYMENT BUREAU, NECESSARY BY GROWTH OF SERVICE.

Constantly increasing demands on the Bureau of Employment, by employers seeking workers and unemployed persons in search of employment, makes necessary larger quarters for the offices of the Bureau now located in the Masonic Temple Building, Harrisburg.

Arrangements have been perfected with Samuel B. Rambo, superintendent of Public Grounds and Buildings, for the occupancy of a property on Fourth Street above Walnut, owned by the State and located within the Capitol Park zone. Work is to be started at once preparing the building for the central offices of the Bureau of Employment which will occupy the new quarters within the next few weeks. The structure is a former dwelling and is unoccupied at the present time.

The central office of the Employment Bureau was opened in Harrisburg on the first of last October and later branch agencies were established in Philadelphia, Pittsburgh, Johnstown and Altoona. As the central office at Harrisburg serves as a clearing house for these branch offices the Harrisburg office has grown tremendously with the coincident growth of the branches.

Since last October the Bureau, through all its offices, has received demands for 13,493 workers. It has received applications for employment from 9,798 unemployed persons. There have been 5,111 of the unemployed applicants referred to jobs and 3,788 unemployed persons have been successful in obtaining employment through the services of the Bureau.

The work of directing the supervision of private employment agencies and superintending offices in all sections of the State is conducted by Director Lightner from the central office at Harrisburg.

The room on the first floor of the Masonic Temple Building, which will be vacated by the Employment Bureau, is to be occupied as an exhibition room by the committee of the Industrial Board which approves safety devices.

BUREAU OF EMPLOYMENT AND THE CHILD LABOR LAW.

An interesting phase of the work of the Bureau of Employment is its co-operation with the public schools in an attempt to secure suitable positions for children leaving school to work.

The new Child Labor Law which provides that children between the ages of 14 and 16 shall go to work only when it is a real necessity, and that even then they shall go to school eight hours a week is bringing the schools in close connection with the industries of the State.

The Bureau of Employment is working hand in hand with these same industries in their effort to find efficient workers for the various divisions of their plants. The Bureau is concerned almost exclusively with the placement of adults, but by the provisions of Section 19 of Act 373, it will be seen that it also has a duty toward juveniles. This Section reads as follows:

"In case bureaus for vocational training and placement, or other similar bureaus, are established by local school authorities, the director shall co-operate with such bureaus in dealing with the employment of children between the ages of fourteen and eighteen years, in such manner as may be advisable. The director shall use all reasonable means to promote the establishment of bureaus for vocational training and placement, in connection with vocational education by public school authorities throughout the State. Until bureaus for vocational training and placement, or other similar bureaus, have been established by local public school authorities, for the purposes of directing, advising, and assisting children in the

selection of suitable vocations, the director shall provide school principals and all public employment officers with special blank forms for the registration of all children having employment certificates, as required by the law, and leaving school lawfully in search of employment."

Following out the requirements of this section, the Bureau of Employment has prepared two blank forms, one upon which the employer may make application for juvenile employes and the other upon which the child may register his qualifications and reasons for wishing employment.

These two forms have been sent out in varying quantities to five hundred and sixty (560) school districts of the State of Pennsylvania, with a letter enclosed, which reads as follows:

To the School Principal.

Dear Sir: Under the new Child Labor Act, one of the conditions which a child must meet before an employment certificate is issued, is that he must obtain a statement signed by the employer or his authorized agent stating that he will give employment to said juvenile. This statement must contain the character of the work, the number of hours per day and per week, which the minor will be required to work.

At the last session of the Legislature an Act was passed establishing under the Department of Labor and Industry a system of regulation of employers seeking employes and of persons seeking employment; and prescribing, as incidental thereto, certain duties of employers, and of county, municipal, township, and school authorities, and of agencies procuring employes for others, etc. Section 19 of Act 373, a copy of which is enclosed, covers the subject of the employment of juveniles.

Under separate cover, I am providing you with a form upon which an employer who wishes to employ juveniles may make application to you; also a form upon which a juvenile who wishes to obtain employment, may make application. These forms will be a record of juveniles who have received working certificates, and will also be a signed statement of employers as to the duties, hours, etc., of the juveniles.

Commissioner John Price Jackson requests that you kindly submit to us the first day of each month, a report giving the following data concerning the juveniles and the employers who engage them: Number of Children receiving employment, Male,.....Female,..... Employment, Permanent, ..., Temporary, ...

By receiving such reports each month from the school principals, the Bureau will be able to make its records of placement work in the State just so much more complete. The Bureau expects in time to be able to include in its report the amount of placement work done by every agency, social, religious, philanthropic, public or private, within the State.

UNDERGRADUATES PLACED IN EMPLOYMENT.

Undergraduate college students were placed in summer employment in agricultural, mechanical, chemical, civil engineering and mining engineering and miscellaneous work through the Bureau of Employment of the Department of Labor and Industry.

Students of many colleges applied to the Employment Bureau for summer work along the lines of their college courses and manufacturers and heads of industrial plants obtained help by communicating with the nearest offices of the Bureau of Employment. Every college and higher school in Pennsylvania provided students for summer work and many of them applied to the Labor Department for information regarding summer positions.

The offices of the Bureau of Employment are located in the Masonic Temple, Harrisburg; Hannan Building, Johnstown; 1519 Arch Street, Philadelphia; Hartje Building, Pittsburgh; and Chamber of Commerce Building, Altoona.

ANALYSIS OF 1915 ACCIDENTS MADE BY BUREAU OF STATISTICS AND INFORMATION.

An analysis to determine the causes of the 61,540 reports of employes injured in accidents in Pennsylvania industrial plants during 1915, has been made in the Bureau of Statistics and Information of the Department of Labor and Industry. Of the 61,540 injuries

reported, 1,203 resulted in death, 7,274 caused disability for more than thirty days and 53,063 caused disability for less than thirty days.

Ten principal causes of accidents were designated in the analytical classification. Handling of tools and other objects caused the greatest number of accidents in the classification. The total, under this heading, is 19,156, of which only 23 were fatal, 1,482 serious or causing disability for more than thirty days, and 17,651 were minor.

Falling objects were responsible for the greatest number of fatal accidents. From a total of 6,906 injuries attributed to this cause 479 were fatal, 1,689 serious, and 4,738 minor.

Machinery was responsible for 8079 injuries including 119 fatal, 1146 serious and 6814 minor. Explosives, electricity, fires, hot and corrosive substances caused 4368 injuries of which 214 were fatal, 599 serious and 3555 minor.

One hundred and three persons died as a result of injuries received in falling, 860 others were seriously injured and 4645 suffered minor injuries from this cause.

Employees working about cars and other moving equipment sustained injuries which resulted in the death of 158, seriously injured 843 and caused minor injuries of 2,919. Stepping on nails and other sharp objects resulted in injuries to 1,047 employees, of whom 14 died, 25 were disabled for more than thirty days. Seven workmen died from injuries sustained by running into or striking against objects and 176 were seriously injured in this manner while 2592 sustained minor injuries. Poisonous substances caused one death, 5 serious injuries and 12 minor injuries.

Industrial Accidents by Duration of Disability—1915.

Duration.	Number.	Per cent.
Under 2 weeks, ...	41,430	67.2
2 to 4 weeks, ...	11,209	18.2
4 to 8 weeks, ...	6,111	10.0
8 to 13 weeks, ...	1,242	2.0
13 weeks and over, ...	345	0.6
Fatal, ...	1,203	2.0

In the classification of miscellaneous causes 5040 workers were injured of whom 85 died, 449 were seriously injured and 4506 disabled for less than thirty days. The complete classification is given in the accompanying table.

Table Showing Classification of Causes of Injuries of 61,540 Workers in 1915—Continued.

Cause.	Cause.									
	Building trades.	Chemicals and allied products.	Clay, glass and stone.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquor and beverages.	Lumber and its remanufacture.	Paper and paper products.	Printing trades.
Falling Objects:										
Rock and Earth.....	36	10	86	.....	1	.....	.....	.....	.....	.....
Collapse of buildings and walls.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collapse of scaffolds and stagings.....	9	9	.....	1	.....	.....	.....	.....	.....	.....
Collapse of piled up material.....	3	5	2	.....	2	.....	.....	.....	.....	.....
Objects dropped by other persons.....	17	6	2	.....	3	.....	.....	.....	.....	.....
Objects falling from trucks or vehicles (not loading or unloading).....	4	7	5	.....	3	.....	.....	.....	.....	.....
Objects falling from buildings, trestles or scaffolds.....	18	11	6	.....	.....	.....	.....	.....	.....	.....
All others.....	48	68	62	4	21	11	2	17	17	1
Fall of Persons:										
From ladder.....	19	17	8	4	6	.....	6	6	4	.....
From scaffolds or platforms.....	19	20	7	.....	2	.....	1	6	1	.....
From vehicles.....	4	7	4	.....	9	.....	.....	.....	.....	.....
From structures in course of erection.....	16	.....	1	.....	.....	.....	.....	.....	.....	.....
From structures (all others).....	5	6	2	.....	.....	.....	.....	.....	.....	.....
From other elevations.....	29	28	28	2	8	6	1	10	.....	.....
Into excavations.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....
Into other openings.....	6	14	7	.....	7	4	.....	6	.....	.....
On level.....	20	46	45	4	18	14	2	13	19	.....
All others.....	1	1	2	1	.....	1	.....	2	2	.....

Handling of Tools and Objects:

Tools in hands of injured person, ...	16	64	54	3	18	19	1	13	11	1
Tools in hands of fellow workman, ...	10	7	15	.....	3	3	.....	2	9	.....
Handling sharp objects, ...	3	16	53	5	11	8	3	10	7	1
Loading and unloading, ...	17	45	69	1	11	3	5	17	22	.....
Carrying and lifting objects not loading or unloading, ...	24	83	61	6	17	14	3	14	6	1
All others, ...	37	64	59	1	10	10	2	15	24	2
Power Vehicles:										
Coupling or uncoupling cars, ...	2	.....	10	.....	.....	1	.....	4	.....	.....
Defective equipment, .....	.....	5	1	.....	.....	.....	.....	.....	.....	.....
Fell from, over or into, ...	2	.....	9	.....	.....	2	.....	3	5	.....
Improperly loaded ladies or cars, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Loading or unloading material, ...	8	16	27	.....	3	.....	.....	2	.....	.....
Struck by car or engine, ...	3	13	59	.....	2	1	1	2	2	1
Struck by overhead or side obstructions, .....	.....	3	3	.....	.....	.....	.....	1	.....	.....
Unlocked frogs or guard rails, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Collisions, ...	1	4	3	.....	4	.....	.....	1	1	.....
Derrailment, ...	2	1	8	.....	.....	.....	.....	2	2	.....
Derailment and replacing cars, ...	1	6	1	.....	2	1	.....	.....	2	.....
Not on track, ...	1	.....	1	.....	.....	.....	.....	.....	.....	.....
On water, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Stepping on Sharp Objects:										
Nails, ...	38	12	5	1	4	7	2	3	8	1
All others, ...	2	2	9	1	1	.....	.....	.....	2	.....
Running into or Striking Against Objects, ...	16	56	37	3	19	6	2	10	13	2
Poisonous Substances, .....	.....	3	1	.....	1	.....	.....	1	.....	.....
Miscellaneous:										
Flying objects—not from machines, tools or explosives, ...	20	32	45	.....	2	1	2	7	4	1
Animals, ...	1	6	9	1	11	2	6	3	1	.....
Doors, windows and gates, exclusive of elevator gates, ...	1	12	10	1	3	4	.....	2	.....	.....
Asphyxiation and suffocation, ...	1	10	2	.....	.....	.....	.....	.....	.....	.....
Lightning, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Heat prostrations, .....	.....	2	5	.....	.....	.....	.....	.....	.....	.....
Frost bites, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Drowning, ...	1	1	.....	.....	.....	.....	2	.....	.....	.....
Intentional violence, ...	1	24	4	1	1	1	.....	.....	.....	.....
All others, ...	13	.....	13	.....	2	6	2	7	6	1
Cause not given, ...	8	1	.....	.....	1	2	.....	.....	.....	.....
Total, ...	543	1,068	1,018	92	340	200	66	385	384	61
Fatal, ...	32	38	35	2	11	3	4	13	19	1
Serious, ...	92	120	119	17	52	34	14	80	47	8
Miscellaneous, ...	419	910	864	73	277	223	48	292	318	52

Table Showing Classification of Causes of Injuries of 61,540 Workers in 1915.—Continued.

Cause.	Textiles.	Miscellaneous products.	Metal and metal products.	Mines and quarries.	Public service.	Tobacco and its products.	Degree.			Total.
							Fatal.	Serious.	Minor.	
Machinery:										
Boilers—steam pipes (including explosions),	1	2	11	7	2	2	2	4	20	24
Prime movers (engines and motors),	15	26	18	27	12	2	2	16	44	62
Transmission apparatus,	28	24	531	80	187	2	22	130	783	935
Working machines,	20	12	353	63	56	2	38	134	448	620
Adjusting machine or work,	9	4	412	44	110	2	4	100	582	686
Starting,	78	49	98	14	18	2	6	39	121	160
Operating and feeding,	6	1	1,234	67	264	2	329	329	1,722	2,057
Stopping,	6	5	30	4	8	2	1	8	38	47
Oiling,	23	9	57	11	9	2	2	30	75	107
Cleaning,	7	5	120	16	26	2	2	46	202	250
Repairing,	11	11	73	26	174	3	25	40	260	308
Breaking of machine or work,	5	14	337	70	153	2	4	97	535	657
Flying objects,	9	3	828	183	552	2	10	108	1,512	1,624
All others,			439	29	25	2	65	65	472	547
Explosives, Electricity, Fires, Hot and Corrosive Substances:										
Explosives, Electricity, Fires, Hot and Corrosive Substances:	10	3	73	9	42	2	2	15	187	204
Corrosive substances,	2	3	148	63	91	37	37	33	254	324
Electricity,	4	3	181	410	16	133	133	190	362	675
Explosives,	12	54	1,737	415	585	39	39	352	2,646	3,037
Hot substances and flames,	1	.....	.....	.....	37	13	13	9	106	128
Conflagration,			.....	.....	97	.....	.....	.....	.....	.....

Faling Objects:

Rock and Earth, ...	2	19	161	4,299	67	.....	418	874	3,350	4,082
Collapse of buildings and walls, .....	.....	1	12	2	1	.....	3	5	12	20
Collapse of scaffolds and stagings, .....	.....	1	50	31	24	.....	5	30	91	126
Collapse of piled up material, ...	3	4	221	7	42	.....	4	54	241	239
Objects dropped by other persons, .....	.....	4	216	32	134	.....	.....	51	374	425
Objects falling from trucks or vehicles (not loading or unloading), ...	1	8	226	41	126	.....	5	66	360	431
Objects falling from buildings, trestles or scaffolds, .....	.....	3	185	19	70	.....	.....	39	270	314
All others, ...	20	74	2,774	545	1,568	.....	39	570	4,623	5,232
Fall of Persons:										
From ladder, ...	12	24	159	31	164	.....	8	87	371	466
From scaffolds or platforms, ...	3	8	132	29	79	.....	13	86	213	312
From vehicles, .....	.....	10	30	47	62	.....	6	43	129	178
From structures in course of erection, .....	.....	.....	12	3	2	.....	.....	10	18	34
From structures (all others), ...	1	3	32	11	18	.....	.....	23	53	79
From other elevations, ...	19	31	325	136	339	.....	45	224	756	1,025
Into excavations, .....	.....	.....	31	9	55	.....	.....	13	87	100
Into other openings, ...	3	8	112	36	128	.....	9	.....	319	328
On level, ...	37	35	1,175	528	1,053	.....	12	371	2,630	3,013
All others, .....	.....	.....	43	3	17	.....	1	3	69	73
Handling of Tools and Objects:										
Tools in hands of injured person, ...	20	55	1,780	680	2,136	.....	4	330	4,537	4,871
Tools in hands of fellow workman, ...	4	7	349	159	436	.....	.....	65	938	1,004
Handling sharp objects, ...	10	9	774	94	286	.....	2	78	1,216	1,296
Loading and unloading, ...	5	33	1,029	404	951	.....	9	249	2,384	2,612
Carrying and lifting objects not loading or unloading, ...	18	45	1,866	670	1,476	.....	3	323	3,979	4,305
All others, ...	9	90	2,414	770	1,560	.....	4	437	4,627	5,068
Power Vehicles:										
Coupling or uncoupling cars, .....	.....	3	108	251	51	.....	3	92	335	430
Defective equipment, .....	.....	.....	4	15	.....	.....	5	1	14	20
Fell from, over or into, ...	1	18	135	184	274	.....	26	131	431	638
Improperly loaded lads or cars, .....	.....	.....	19	331	2	.....	.....	2	350	352
Loading or unloading material, ...	2	17	225	231	404	.....	.....	116	830	997
Struck by car or engine, .....	.....	11	191	334	78	.....	107	300	312	719
Struck by overhead or side obstructions, .....	.....	3	31	202	19	.....	11	53	198	262
Unlocked frogs or guard rails, .....	.....	.....	.....	2	.....	.....	.....	.....	5	5
Collisions, ...	1	4	22	93	9	.....	3	39	101	143
Derailment and replacing cars, ...	1	2	23	313	17	.....	.....	104	267	371
Not on track, .....	.....	.....	5	3	19	.....	2	3	33	40
On water, .....	.....	.....	.....	.....	2	.....	.....	.....	3	3
Stepping on Sharp Objects:										
Nails, ...	4	14	207	170	283	.....	14	13	734	761
All others, ...	3	3	108	22	131	.....	.....	12	274	286

Table Showing Classification of Causes of Injuries of 61,540 Workers in 1915—Continued.

Cause.	Textiles.	Miscellaneous Products.	Metal and metal products.	Mines and quarries.	Public service.	Tobacco and its products.	Degree.			Total.
							Fatal.	Serious.	Minor.	
Running into or Striking Against Objects, ...	14	20	1,300	369	908	.....	7	176	2,592	2,775
Poisonous Substances, ...	1	.....	7	1	3	.....	1	5	12	18
Miscellaneous:										
Flying objects—not from machines, tools or explosives, ...	6	28	1,184	567	978	.....	18	219	2,640	2,877
Animals, ...	1	18	20	326	31	.....	8	67	361	436
Doors, windows and gates, exclusive of elevator gates, ...	2	7	172	85	165	1	.....	57	409	466
Asphyxiation and suffocation, .....	.....	.....	39	28	5	.....	25	2	58	85
Lightning, .....	.....	.....	.....	.....	.....	.....	1	.....	1	2
Heat prostrations, .....	.....	4	27	3	11	.....	3	4	45	52
Frost bites, .....	.....	.....	2	.....	.....	.....	.....	.....	.....	9
Drowning, .....	.....	.....	31	12	1	.....	9	3	90	94
Intentional violence, ...	13	18	426	199	255	.....	20	85	856	961
All others, ...	1	1	18	27	4	.....	.....	12	46	58
Cause not given, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, ...	404	878	25,094	13,955	16,919	18	1,203	7,274	53,063	61,540
Fatal, ...	5	28	212	749	51	.....	.....	.....	.....	.....
Serious, ...	61	127	2,478	2,338	1,680	7	.....	.....	.....	.....
Minor, ...	398	718	22,404	10,868	15,188	11	.....	.....	.....	.....

FACTS ABOUT COUNTY INDUSTRIES IN REPORT OF DEPARTMENT.

A classification of Pennsylvania industries by counties is a feature of the first volume of the report of the Commissioner of the Department of Labor and Industry for the year 1915. This volume contains industrial and labor data collected in the Bureau of Statistics and Information. It is now being received from the printer.

The county classification shows the number of establishments, in each of the 67 counties, engaged in the manufacture of various products, the number of days the plants were in operation during the year, number of employes, total wages paid and the amount and value of the products.

Residents of each county will be enabled to learn, from the report, the industries in each county with detailed information concerning them. In connection with this classification a summary of the industries is given with information regarding inducements offered to attract industrial enterprises to the various communities. A chapter of the report is devoted, exclusively, to descriptions of welfare work conducted by industrial plants in all sections of the State and the beneficent results of the efforts along these lines.

Another chapter, prepared by Millard B. King, Director of Industrial Education of the Pennsylvania Department of Public Instruction, outlines the strides made in educational activities by various plants.

These two chapters afford an insight into the methods of conducting welfare work and improving generally the continuation school system established by the Child Labor Law. General tabulations of products as to value and cost, and wages paid employes in the various industries are included in the volume. Further classification designating the numbers of men and women, girls and boys employed in the various plants of the State is also made. Data for this volume of the report have been collected at a nominal cost to the State solely through the use of the mails and virtually all employers showed a commendable spirit of co-operation in supplying data for the report.

WORKMEN'S COMPENSATION ACT BENEFITS ALL CLASSES OF WORKERS.

The classes of trades and nationalities of workers affected by the Workmen's Compensation Act are indicated by a recent summary of a report of compensation agreements approved in the Bureau of Compensation. Twenty-five agreements developing in the regular routine of the Bureau, comprising a typical day, showed the total amount of compensation to be paid in the 25 cases was \$57,656. The average amount due in each case was \$2,306. The accidents causing the agreement cases left 21 widows and 29 fatherless children. The total amount of weekly wage received by the 25 men was \$358, or an annual pay roll of \$18,616 with the average weekly wage being \$14.03.

Following were the occupations of the 25 men:

Coal Miners, ...	13	Civil Engineers, . . .	1
Cement Workers, ..	1	Brick Masons, . . .	1
Iron Workers, ...	4	Laborers, ...	1
Railroad Men, ...	3	Ice Dealers, ...	1

Their nationalities were divided as follows:

American, ...	13	Swede, ...	1
Polish, ...	4	Irish, ...	1
Slavs, ...	3	Russian, ...	1
Welsh, ...	1	Lithuanian, ...	1

Communication to Insurance Carriers.

The Workmen's Compensation Board has directed that the following letter be sent to all insurance carriers insuring against compensation liability in Pennsylvania.

"It has come to the attention of the Workmen's Compensation Board that in certain cases where compensation has been paid under agreements or awards to the attorneys of claimants, the attorneys have retained or induced the claimant to pay to them exorbitant fees or unduly large percentages of the installments paid, without having had their fees approved by the Board, as required by Section 501 of the Compensation Act.

"The Board emphatically disapproves of such practice on the part of the attorneys. In order that this may be impossible in the future, the Board requests you to pay all compensation due, either under an agreement or an award, direct to the person entitled thereto, even though such person be represented by an attorney of record, unless the attorney shall furnish to you the Board's approval of his claim for legal services and expenses."

Rulings by Workmen's Compensation Board.

The Workmen's Compensation Board has made the following ruling affecting the section of the Compensation Act which deals with the method of determining wages as a basis for compensation:

"Coal mining is a continuous employment and not a seasonal employment under the meaning of Section 309, the Workmen's Compensation Act of 1915."

Other rulings adopted by the Board are as follows:

Costs.

The referee shall require each party to file with him within four days after final hearing an itemized statement of the costs, incurred by the party for the hearing and furnish a copy of the same to each adverse party.

The referee shall tax the costs incurred by the parties as shown by the itemized statement filed by them and shall place such costs as are allowed by him together with those incurred by the referee, upon the unsuccessful party, unless the special circumstances of the case shall, in his judgment, make it proper to otherwise dispose of them. In such case he may put upon each party the costs incurred by him, or he may divide the costs in such proportion as he shall deem proper or he may put the costs upon the successful party and shall in his award set forth fully his reasons for so disposing of the costs.

The costs of the hearing shall be paid to the referee and shall be paid over by him to the parties entitled thereto, unless the party on whose behalf the costs have been incurred shall present receipts from the parties entitled thereto, in which case the costs so paid by the party shall be paid to him.

Hearings by Referees Where No Answer is Filed.

If the defendant shall fail to file an answer within seven days after notice of the petition has been served upon him, the referee shall fix a hearing not less than twelve days nor more than twenty-one days after notice of the filing of the petition shall have been mailed or, delivered to all adverse parties thereto. At such hearing no evidence shall be heard on behalf of the defendant to deny, add to or vary, the facts alleged in the petition, but the defendant may deny that compensation is payable under the facts alleged in the petition.

If the petition alleges sufficient facts to enable the referee to make an award thereon, without the proof of further facts, the referee shall fix a hearing at his principal office and shall notify the claimant that he need not attend the hearing, in which case, if the referee after hearing the defendant believes that the right to compensation is doubtful, he shall notify the claimant that unless he shall present argument in support of the petition, the referee will disallow the claim. If the claimant shall within five days after the notice has been served upon him, notify the referee of his desire to present argument, the referee shall fix the hearing at a time and place convenient to all parties as provided in Section 415.

If the petition does not aver sufficient facts to enable the referee to make an award thereon the referee shall fix the hearing at a time and place convenient to all parties, as provided in Section 415, at which time evidence shall be heard on both sides upon such facts not alleged in the petition as are necessary to enable him to make an award.

In all cases when the defendant shall fail to file an answer the referee shall have the same power to make an investigation in person or by physicians or experts as though an answer had been filed.

Appeals from Referee.

Appeals shall be heard without the appearance of the parties in person or by counsel unless the appellant shall at the time of filing his appeal notify the Board that he desires to appear in person or by counsel, or the appellant shall within five days after notice of the appeal has been served upon him notify the Board that he desires to appear in person or by counsel.

The appellant may file a written brief of argument at any time within ten days after the date of filing his appeal and appellee may file a written brief of argument within ten days after notice of the appeal has been served upon him.

All cases in which either party has notified the Board that he desires to appear in person or by counsel will be heard at the sitting of the Board held by it in the district in which the case originated next following the expiration of ten days after the service of notice upon the adverse party, provided, however that if the parties shall petition the Board to hear the appeal in any district other than that in which the case originated, the Board shall fix the hearing at its next meeting within such district.

If neither party has notified the Board of his desire to appear in person or by counsel, the Board will consider the appeal at the next meeting or sitting held by it after the expiration of ten days from the date of service of notice of appeal upon the appellee.

Ruling Rescinded.

The following ruling has been rescinded by the Workman's Compensation Board:

"Those engaged in the business of fruit growing, poultry and stock raising, dairying and horticulture, as a business and not merely as incidental to general farming, come under the Workmen's Compensation Act of 1915, and are not exempted by Act 343 of June 3, 1915, which is a supplement to the said Act."

ELEVATOR CODE, ADOPTED BY INDUSTRIAL BOARD IS EFFECTIVE JULY 1, 1916.

Every elevator for passengers or freight in Pennsylvania institutions, hotels, industrial plants, mercantile establishments and other structures must conform with the requirements in the elevator code, adopted by the Industrial Board of the Department of Labor and Industry and which becomes effective July 1, 1916. Elevators constructed and installed in cities of the first and second class are exempted as municipal regulations prevail in such communities.

The complete elevator code was adopted by the Industrial Board after public hearings had been held in various sections of the State. Copies of the complete code may be obtained by application to Commissioner John Price Jackson of the Department of Labor and Industry, Harrisburg.

Every elevator, affected by the code, may be constructed and installed after July 1, 1916, only after two complete sets of plans and specifications have been submitted to the Department of Labor and

Industry, and approved, and a permit issued for the installation. Removal of existing elevators to a new location is considered as a new installation. Permits must be obtained before extensive repairs may be made to an elevator. Every elevator must have stipulated safety devices.

Examinations have been held recently, by the Department of Labor and Industry, for the licensing of inspectors other than State Inspectors and whose inspections shall be approved by the State.

Every passenger elevator must be inspected at least once every three months and a freight elevator must be inspected at least once every six months. Inspection of elevators, for the Labor Department, will be supervised through the Division of Elevator Inspection in the Bureau of Inspection.

Passenger elevators must be of the following types: electric drum, electric traction, electric automatic push button, hydraulic plunger, horizontal cylinder and vertical cylinder. Under no consideration may passenger elevator machines be operated by means of belts or chains, friction gearing or clutch mechanism.

Elevators may not be erected in any thoroughfare when it is necessary to pass through the shaftway, or under the elevator whether inside or outside of a building. The lifting capacity of passenger elevators must not be less than eighty pounds to the square foot of floor area of the elevator car, excepting in hospitals, where the capacity may be sixty pounds to the square foot. The maximum speed of passenger elevators is set at six hundred feet per minute.

Inspectors of the Department of Labor and Industry have inspected over four hundred elevators and condemned fifty of these within the last few months. Elevators in State institutions are now being inspected.

Industrial Board Rulings.

The Industrial Board of the Department of Labor and Industry has adopted two rulings prohibiting the employment of minors under eighteen years from operating elevators or doing acetylene welding.

The rulings are as follows:

Elevators: "For the purpose of applying the Child Labor Act the Industrial Board rules that elevators shall be added to the list of machinery, whose operation is forbidden to minors under eighteen years of age."

Acetylene Welding: "Goggles or masks fitted with the proper colored glass shall be used in all welding works and minors under the age of eighteen years shall not be permitted to do such work."

SYNOPSIS OF RULINGS ON THE WOMEN'S LABOR ACT OF 1913, P. L. 1024.

Short term summer hotels are permitted to subdivide the day of rest, giving two half days in each calendar week.

Hotels and institutions employing not more than ten women are permitted to treat the day of rest in any of the following modes:

1. Give one complete day of twenty-four hours in each calendar week.

2. Give twenty-four hours consecutive rest, beginning at any hour on the one day to continue until a corresponding hour the following day.

3. Give complete day off on Sunday one week, and complete day off on week day the next week. (Variation under plan of day in each week).

4. Give alternate Sunday off with one-half week day, totalling two full days in each fortnight.

5. When it works no injustice to the employes, give two half holidays per week, defining half day as five hours consecutive service.

Hotels and institutions employing more than ten women: Give one complete day of rest in each calendar week.

Give twenty-four hours of consecutive rest beginning at any hour of the day to continue until a corresponding hour the following day.

This involves recognition of the fact that much of such service is three period work, not easily divided by any formal definition of what constitutes half-day service.

Posting of notices. Posting of definite schedules in all cases, showing time for individual and (in larger hotels—third class) for the particular position.

MEETING DAYS FOR INDUSTRIAL BOARD.

The Industrial Board of the Department of Labor and Industry has definitely adopted as its day for stated meetings, the first Tuesday of each month. These regular meetings will be held in Philadelphia. Other meetings will be held in various parts of the State as necessary.

SAFETY STANDARDS

OF THE

INDUSTRIAL BOARD



PENNSYLVANIA DEPARTMENT OF
LABOR AND INDUSTRY

CEREAL MILLS, MALTHOUSES AND GRAIN ELEVATORS

OPERATIVE ON AND AFTER JUNE 1, 1916

INDUSTRIAL BOARD.
DEPARTMENT OF LABOR AND INDUSTRY.

STATE OF PENNSYLVANIA.

JOHN PRICE JACKSON, Chairman,
Harrisburg.

OTTO T. MALLERY,
Philadelphia.

JAMES C. CRONIN,
Philadelphia.

COL. JOHN P. WOOD,
Philadelphia.

MRS. SAMUEL SEMPLE,
Titusville.

WILLIAM LAUDER, Secretary,
Harrisburg.

RULES AND REGULATIONS

Relating to the

CONSTRUCTION, MAINTENANCE AND OPERATION OF CEREAL MILLS,
MALTHOUSES AND GRAIN ELEVATORS IN PENNSYLVANIA.

PETITIONS.

The following Safety Standards have been adopted by the Industrial Board, subject to the provisions of the law (Act 267, Section 15, P. L. 1913) which provides that persons affected may petition the Board for changes in the regulations. Upon the receipt of such petition, it will be reviewed by the Board and if considered necessary a public hearing will be called in regard thereto.

PENALTIES.

Every person or persons who violates any of the provisions of Act 267 of June 2, 1913, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officer or agent of the Department of Labor and Industry in the performance of his duties in accordance with the said rules and regulations, shall be deemed guilty of a misdemeanor and shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding one month, or both, at the discretion of the court.

CEREAL MILLS, MALTHOUSES AND GRAIN ELEVATORS.

The word "SHALL" where used is to be understood as mandatory and "SHOULD" as advisory.

Caution:—Employes shall not remove or make ineffective any safeguards while same are in use, except for the purpose of making repairs, and such safeguards so removed shall be replaced.

The provisions of all Safety Standards issued by the Industrial Board shall apply in all matters not specifically covered herein

- (a) Application. These standards shall apply to all establishments commonly known as flour, feed, cereal mills and grain elevators, and to malthouse elevators where such elevators are specifically referred to.
- (b) New Construction. The entire construction shall be of such a character as to eliminate horizontal ledges on walls and ceilings.
- (c) In all existing mills, each interior opening from boiler rooms and engine rooms shall be provided on either side of the wall with an approved automatic self-closing fire door. When the boiler room or engine room is situated in the basement or cellar, the walls and ceilings shall be fireproof and shall have no openings to the mill proper except for the transmission of power, light, heat and water. (Where the engine room is separated from the boiler room by a fireproof partition, access from the engine room to the mill proper is permitted). In new mills the boiler room shall connect only with the engine room and the engine room shall be separated from the mill proper by a fire wall parapeted three (3) feet, having no openings except those necessary for the transmission of power, light, heat, water and one entrance for ingress and egress properly protected upon the mill side with approved self-closing door and the engine room side with approved automatic fireproof door.
- (d) In plants hereafter erected, heating and grain tempering shall be carried on in such a manner that no open flames shall come into contact with the air of the mill.
In existing plants, where heating furnaces of any description, including tempering furnaces and stoves, are located within the mill proper, the points at which fuel is charged and ashes

removed shall be closed off from the air of the mill by a fireproof enclosure, vented to the outside air by a fireproof pipe, the entrance to which enclosure shall be kept closed, except for ingress and egress, and notice to that effect shall be posted on the door. No unprotected flues, from such apparatus, shall be allowed to pass through the mill proper.

- (e) Electric generator sets shall be either in engine room or in a room similarly cut off, as provided in Section (c). In future installations direct current motors unless located in the engine room shall be of the enclosed type. Existing installations of direct current motors or generators outside the engine room of mills shall be in dust-proof enclosure properly ventilated to the outer air.
- (f) Illumination in all mills and in all elevators that form parts of mills shall be by approved electric lighting, except that in existing mills located in a town or village where there is no electric light service, a system of lighting shall be installed which shall meet the approval of the Industrial Board. The use of safety lamps approved by the Industrial Board will be permitted.
- (g) All belt conveyors for receiving grain shall be provided at the point of charge with a hood connected with an exhaust fan of sufficient capacity to remove or prevent the escape of all dust arising from the conveyor, and such fan shall be kept in operation when the conveyor is in use; this rule shall not apply to the point at which a railroad car hopper discharges on to a belt conveyor.
- (h) Tops of grain garnerers over scales shall be covered with wood, metal, or other impervious material, said covers to be tight fitting to prevent entirely the escape of dust. This rule also applies to malthouse elevators.
- (i) Until grain is thoroughly cleaned, hoppers for weighing shall be provided with tight fitting covers of wood, metal or other material impervious to dust and with flexible dust proof connections to the bottom of the garner, if there is a garner. This section shall apply only to weighing hoppers located indoors. This rule also applies to malthouse elevators.
- (j) Before grain is ground or passes to grinding machines, foreign substances shall be removed by separators, or proper sieves and magnets.

- (k) Dust rooms or "stive" rooms are prohibited. A fan discharging dust shall discharge either to the outer air at such points where the dust shall not re-enter the mill or adjacent buildings, or to a dust collector, and the air vent or outlet of every cyclone dust collector shall discharge to the outer air or to another dust collector. All tubular dust collectors shall be maintained in a proper state of repair so as to prevent leakage of dust into the room. A fan which discharges into any dust collector shall be kept in operation at all times while the machine or machines with which it is connected are in operation. There shall be no direct connection between dust collectors and boiler rooms or incinerators. This rule also applies to malthouse elevators.
- (l) The piping of all exhaust systems and all ducts shall be kept tight. This rule also applies to malthouse elevators.
- (m) Mills and all buildings, structures and elevators, used in connection therewith shall be kept thoroughly clean and free from dust. Dust shall be removed from floors and machinery daily, and all other parts of the mill, including fixtures, bearings, ledges, projections, side walls and ceilings, and all buildings, structures and elevators shall be kept free from any accumulation of dust. In every mill where more than ten (10) persons are employed at least one (1) person shall be employed whose sole duty it shall be to attend to cleaning. In cleaning, such methods shall be used as will prevent the suspension of dust in the air. This section also applies to malthouse elevators.
- (n) No person in a mill shall carry or have upon his person matches, cigar lighters or contrivances or devices for lighting. Every mill shall be provided, at its entrance, with two (2) covered fireproof receptacles, one (1) for matches and the other for lighted cigars, cigarettes or pipe contents. Each of such receptacles shall be plainly labeled to show the purpose for which it is provided. No person shall enter such mill without first depositing in the receptacle provided any and all such matter. Notice to the effect that the carrying of matches is prohibited shall be conspicuously posted.
- (o) Approved two and one-half ($2\frac{1}{2}$) gallon chemical extinguishers shall be distributed throughout the building in the proportion of not less than one (1) to each two thousand five hundred (2,500) square feet of floor area; extinguishers to be

placed at readily accessible points and preferably near the usual working place of workmen. Three (3) pails and a fifty (50) gallon cask of water may be considered the equivalent of one (1) two and one-half ($2\frac{1}{2}$) gallon extinguisher.

Near each electric motor or other large electric appliance, at least one (1) one-quart chemical extinguisher of carbon tetrachloride type must be provided. This rule also applies to malt-house elevators, but shall not apply to buildings equipped with approved sprinkler system.

(p) Pits for elevator boots shall be constructed of cement or its equivalent, and have clearance of not less than three (3) feet on one side or two (2) feet on each of two sides of the boots.

(q) Employes' elevators shall be provided with an automatic stop to prevent the passenger being carried over the top.

(r) Metal cans with self-closing covers shall be provided on each floor of buildings containing machinery in which to place oiling waste or other readily combustible material.

(s) Provisions shall be made for the efficient removal of frictional or statical electricity on all machinery handling grain or its products or operating where dust may be present.

JOHN PRICE JACKSON, Chairman,
OTTO T. MALJERY,
JAMES C. CRONIN,
JOHN P. WOOD,
MRS. SAMUEL SEMPLE,
WILLIAM LAUDER, Secretary.

Adopted April 13, 1916.

Industrial Board.

SAFETY STANDARDS

OF THE

INDUSTRIAL BOARD



PENNSYLVANIA DEPARTMENT OF
LABOR AND INDUSTRY

LIGHTING CODE

OPERATIVE ON AND AFTER JUNE 1, 1916.

INDUSTRIAL BOARD
DEPARTMENT OF LABOR AND INDUSTRY,
STATE OF PENNSYLVANIA.

JOHN PRICE JACKSON, Chairman,
Harrisburg.

OTTO T. MALLERY,
Philadelphia.

JAMES C. CRONIN,
Philadelphia.

COL. JOHN P. WOOD,
Philadelphia.

MRS. SAMUEL SEMPLE,
Titusville.

WILLIAM LAUDER, Secretary,
Harrisburg.

RULES AND REGULATIONS RELATING TO LIGHTING CODE.

PETITIONS.

The following Safety Standards have been adopted by the Industrial Board, subject to the provisions of the law (Act 267, Section 15, P. L. 1913) which provides that persons affected may petition the Board for changes in the regulations. Upon the receipt of such petition, it will be reviewed by the Board and if considered necessary a public hearing will be called in regard thereto.

PENALTIES.

Every person or persons who violates any of the provisions of Act 267 of June 2, 1913, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officers or agents of the Department of Labor and Industry in the performance of his duties in accordance with the said rules and regulations, shall be deemed guilty of a misdemeanor and shall upon conviction thereof, be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding one month, or both, at the discretion of the court.

CODE OF LIGHTING FACTORIES, MILLS AND OTHER WORK PLACES.

Rule I. GENERAL REQUIREMENT.

Working or traversed spaces in buildings or grounds shall be supplied during the time of use with artificial light in accordance with the following rules whenever natural light falls below the intensities specified in Rule II.

Rule II. INTENSITY REQUIRED.

The desirable illumination intensity to be provided and the minimum intensity which shall be maintained are shown in the following table:*

	Minimum ft. candles.	At the Work. Ordinary acceptable practice ft. candles.
1. Roadways and yard thoroughfares, ...	.05	.05- 0.25
2. Stairways, passageways, aisles, storage spaces, ...	0.25	0.25- 0.5
3. Rough manufacturing operations such as foundry work, rough machining, rough as- sembling, rough bench work, ...	1.25	1.25- 2.5
4. Fine manufacturing operations such as fine lathe work, pattern and tool making, light colored textiles, tobacco manufacture, ...	3.50	3.50- 6.0
5. Special cases of fine work such as watch mak- ing, engraving, drafting, dark colored tex- tile, ...	5.00	10.00-15.00

Uncertain cases and intermediate requirements are to be left to the judgment of the State Industrial Board.

*This rule is intended to provide adequate illumination at the work. For purposes of measurement a horizontal reference plane 30" above the floor is to be taken, and a properly standardized portable photometer or illuminometer used.

For purposes of very rough estimate it may be stated that with a good overhead system of lighting one candle power (spherical) per square foot of floor area should produce an illumination intensity of about three foot candles.

Rule III. SHADING OF LAMPS.

Glare either from the lamps or unduly bright surfaces produce eye-strain and increases accident hazard.

Exposed bare lamps shall not be used except when they are out of the ordinary line of vision; lamps should be suitably fitted to minimize glare.

Rule IV.

DISTRIBUTION OF LIGHT ON THE WORK.

Lamps shall be so arranged as to secure a good distribution of light on the work, avoiding objectionable shadows and sharp contrasts of intensity.

Rule V. EMERGENCY LIGHTING.

Emergency lighting shall be provided in all work space, aisles, stairways, passageways, and exits; such lights shall be so arranged as to insure their reliable operation when through accident or other cause the regular lighting is extinguished.

Rule VI.

SWITCHING AND CONTROLLING APPARATUS.

Switching or controlling apparatus shall be so placed that at least pilot or night lights may be turned on at the main point of entrance.

JOHN PRICE JACKSON, Chairman.

OTTO T. MALLERY,

JAMES C. CRONIN,

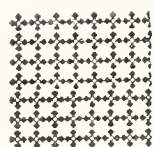
JOHN P. WOOD,

MRS. SAMUEL SEMPLE,

WILLIAM LAUDER, Secretary,

Adopted April 13, 1916.

Industrial Board.



MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



A BULLETIN OF INFORMATION FOR THE PUBLIC

JULY, 1916

HARRISBURG, PA.:
WM. STANLEY RAY, STATE PRINTER
1916

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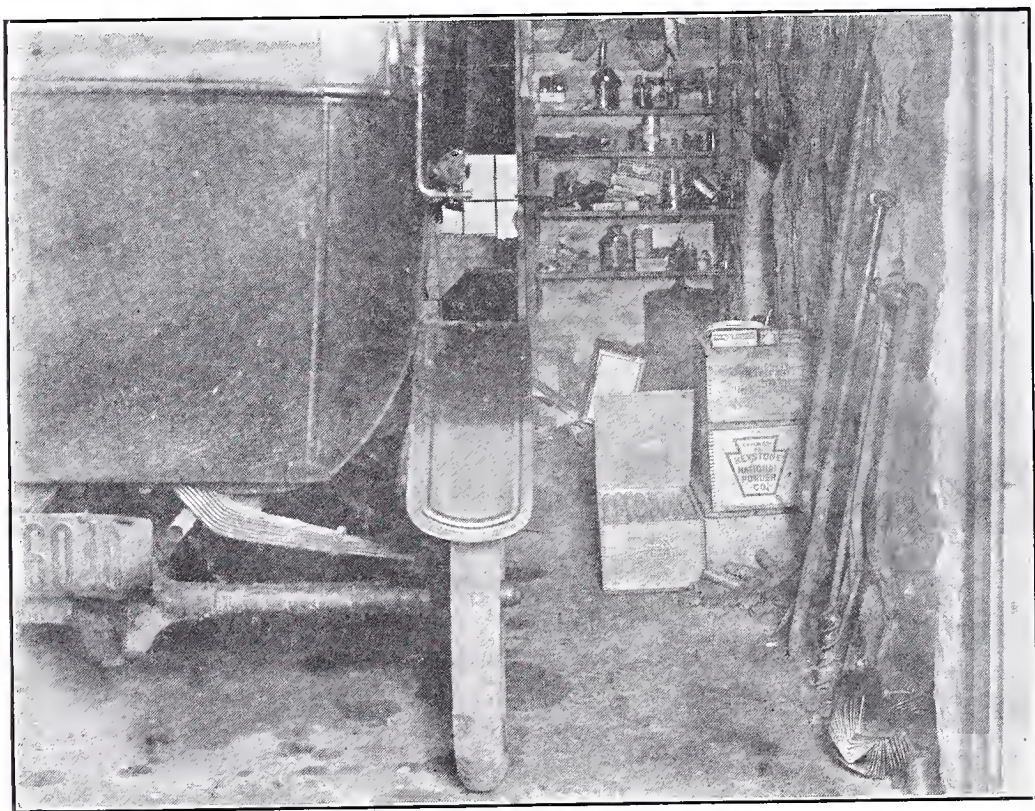
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Explosives cause many deaths and injuries in Pennsylvania each year. Fortunately the man in the upper picture was stopped in his dangerous use of metal tools before a fatality resulted. Explosives should never be stored, as shown in the lower picture, where nearby crowbars and other heavy tools may fall from position and cause havoc.

LABOR DISTURBANCE IN PITTSBURGH, WHERE SEVERAL MEN WERE KILLED, EARLY IN MAY, INVESTIGATED BY MEMBER OF THE INDUSTRIAL BOARD OF THE DEPARTMENT OF LABOR AND INDUSTRY. POLICY ADOPTED BY THE INDUSTRIAL BOARD TO INVESTIGATE CAUSES OF LABOR DISTURBANCES WHENEVER MILITIA IS CALLED.

An investigation of the disturbances at the plant of the Edgar Thomson Company, near Pittsburgh, where a number of men were killed and wounded during the strike disturbances early in May was made in behalf of the Industrial Board of the Department of Labor and Industry by Mrs. Samuel Semple, a Member of the Board. Her report to Commissioner John Price Jackson is as follows:

Titusville, Pa., May 6, 1916.

Commissioner Jackson:

Following your wishes, I took with me Miss Torrens, of the Pittsburgh Inspectors, yesterday, Friday, May 5th, and went to Braddock to endeavor to gain information as to the local and immediate causes of the riot there, around the plant of the Edgar Thomson Company. We walked along the street which lies parallel to the tracks of the B. & O. road; and, beginning with the flagman at the crossing, we made casual inquiries as we went concerning the scene and the course of the riot. It was noticeable that the further away from the actual scene of the trouble, the more definite and bloody were the descriptions. In the course of this walk we happened upon the home of the man who had died of his wounds in the hospital. The funeral party had not yet returned, and neighbors were in charge of the house, which was anything but an abode of luxury. As nearly as the broken foreign speech, and the unfamiliarity with foreign names would allow me to reach a conclusion, I believe this was the same case described to us by one of the parish priests whom we afterward visited. The dead man's wife was afraid to have him go to work the day on which the riot occurred, lest he should be hurt. He restlessly went out for a walk to see what was happening in the crowd; was shot and taken to the hospital; and his wife knew nothing of his whereabouts until evening. In the block below the scene of the riot, the only people we could talk to without making a formal "interview" were women in charge of a grocery store, apparently Italians—or Bohemians. They were reluctant to discuss the riot, and insisted that they kept inside their store and shut the door.

The windows of what was evidently the office of the Thomson plant were boarded up tight. The plant lies along the B. & O. tracks. On the cross street in front of the plant we talked with the women in the houses directly opposite. The men of their families work in the Thomson plant; the women reported them well satisfied (two raises in wages within the year, without demand, and another promised in August). The sympathies of the women were with the Thomson plant in the riot, because of their fears for the safety of their relatives. Nevertheless, they reported the crowd as almost wholly unarmed, and as not drunken to any noticeable extent. One of the women said some of them "had a little bit in them;" but she added, "It couldn't be much, for the saloons are closed all around." On the question of revolvers in the crowd this same woman said, "Only a few had any revolvers; it would have been better for them if they had had more!" As the women described it, the street had a lot of idly curious men standing in it, or moving aimlessly about. A large group of marching men from East Pittsburgh came down the hill and joined them. Several told the same story of some one on, or down by, the B. & O. tracks picking up a stone and throwing it over the fence into the yard of the plant. Two or three said this some one was a boy. That started the trouble; the men came out from work into the yard of the plant; they seized pieces of wood (one that we saw that had been used as a weapon by a Thomson workman looked like a fence picket), and evidently rifles were distributed. One woman's story was that, after the disturbance the day before, several rifles were brought, and stored in the engine room. No shooting occurred for a time. Then, the women said, two elderly men tried to pull boards from the fence. They did not succeed, and a young man went to their assistance. He succeeded; and, as he stood before the breach thus made in the fence, he was shot and instantly killed. The women saw him fall, and agreed in the story. Shooting continued, and kept up even as the crowd pressed back, and the shots pursued the men as they ran up the alley away from the scene. This fits in with the fact that the wounds of most of the men in the hospital are in the back. One of the parish priests told us that a woman of his parish, who lived very near the Thomson plant saw one man on the outside, after the trouble began, press to the fence, and use his revolver through a crack between the boards. That was the only thing we heard that verged on evidence of deliberate intent on the part of the mob. The dwelling houses across the street had windows broken by shots on both the second and the first floors, and were otherwise marked by shots on the outside.

After talking to the women in the immediate neighborhood, we went to the priests of the three nearest churches. All three are in close touch with the situation through their parishioners, but only

one was actually on the scene of the trouble. He was called there by a telephone announcement of the disturbance. He said most of the shooting was done with "slugs, bigger than shot, but smaller than bullets." He added that there were bullets also. All three priests said that most of the injured men were not strikers at all; some of them were even carrying their food pails, on their way to work.

We were in one department store on the main street two or three blocks away from the scene of the riot. They said the streets were full of excited people after the trouble; but they did not close the doors of their store; and again the testimony was that it was not a drunken crowd.

It all seemed to me to sum up as a typically human situation, with no deliberate intention on either side to create trouble. While the priests felt that there must have been mob leaders who escaped, the women in the vicinity said there seemed to be no leaders—no one in command, or of any special prominence. I went to Braddock with the feeling that the blame of the acute outbreak rested on the Thomson plant; for stories had come to me indicating that the firing from the plant had no provocation. The stories on the ground removed that feeling from my mind, except in these two particulars:—the shooting was evidently done to kill, not merely to warn, from the very outset; and it continued longer than could possibly be construed as necessary, following the crowd in its flight. Both of these could be charged to excitement, rather than to cruel intention.

On behalf of the crowd, the local evidence seemed to me to show that it was not armed, that it was not drunken, and that it also was merely swept by a sudden excitement. It was not organized; it had no visible leadership.

We went finally to the Braddock hospital, where the injured men were taken. The man who made the breach in the fence died as he fell. One other died on the way to the hospital, which is only about six blocks distant. A third died on the stretcher as they carried him into the hospital. Of the other eight, who were registered as admitted patients, one died later; and seven were patients when we were there. It was expected that all of them would recover. Three of these were Westinghouse men on strike; four were men who claim to have been merely bystanders, or on their way to work. All were foreigners, speaking English very imperfectly; and all were quite mature. I talked with the one who seemed least uncomfortable, and the most able to speak English. He said there were no guns or revolvers in the crowd, and that none of them knew how the trouble began. These seven men were in a special ward segregated under the care of special guards detailed by the coroner, who allowed no men to see the prisoner-patients, fearing conspiracy. Their women were allowed

to see them; and under this general permission we were allowed to visit the ward. The guards seemed curious concerning our presence; and for many reasons the chance for conversation with the men was quite limited. But again it was the story of lack of arms, of organization, and of realization how it all came about.

You will understand of course that I am aware that this report deals only with the surface of things. I have not tried to touch the great economic questions lying behind all this. I have tried only to tell the story, as we gathered it from people on the spot, of just how riot and bloodshed astonished Braddock that day, and astonished also the people who took part in it.

Very truly yours,

(Mrs. Samuel Semple).

(Signed) H. M. SEMPLE.

P. S.—It is perhaps worth while to add that I found no feeling of opposition to the presence of the militia. The priests voiced the general sentiment that its presence had been a good influence. The priests added that militia was much to be preferred to armed guards and hastily picked up deputies.

Industrial Board Will Investigate Similar Disturbances.

It has been decided that when the State militia is requested by local authorities and sent to any community in Pennsylvania as a result of disturbances growing out of labor difficulties, members of the Industrial Board, of the Department of Labor and Industry, will immediately go to such community for the purpose of conducting an investigation.

That policy has been adopted by the Board with the aim of aiding in effecting a solution of the difficulties by determining the causes. The Industrial Board, in such investigating work, will act in full co-operation with the Bureau of Mediation of the Labor Department whose representatives extend their efforts toward adjusting the difficulties between employers and employees.

PENNSYLVANIA CANNERIES MUST CONFORM TO THE STANDARDS ESTABLISHED BY THE INDUSTRIAL BOARD OF THE DEPARTMENT OF LABOR AND INDUSTRY.

With the approach of the season for operating canneries in Pennsylvania, inspectors of the Department of Labor and Industry were notified to inspect all canning factories in their districts.

Before any seasonal canneries may be put in operation, the owner or operator must obtain a permit from the Labor Department after demonstrating that the cannery conforms to the Industrial Board regulations. The permit is good for one year.

The complete Safety Standards for Canneries may be obtained, in pamphlet form, from the Labor Department at Harrisburg. These regulations prohibit the location of canneries in any insanitary place or in a place which cannot be made sanitary and maintained in a sanitary condition. All refuse must be disposed of in such a manner that it will not become objectionable and the factory must be so located as to receive and distribute promptly the fruit and vegetable products, without danger of damage or deterioration.

Canneries must be kept clean, well ventilated and properly lighted. The ceilings must be of sufficient height to permit ample clearance for all work. The interior of the workrooms must be kept a light color either by paint or whitewash or other suitable method. Gutters must be provided to carry all waste to sewers. Sanitary facilities must be installed for the health and protection of the employes.

A supply of cool drinking water must be provided. Wearing apparel, not in actual use, must not be permitted in workrooms either where fruit is prepared or placed in containers. No person suffering from a communicable disease may be employed. Outer clothing, including head covering used by fruit preparers, must be of suitable material and must be kept clean at all times.

Wash places must be provided in workrooms, to accommodate all employes and such wash places must be equipped with a sufficient supply of water and provided with individual towels and plenty of soap. Suitable washrooms and dressing rooms must be provided for female employes.

**THE INDUSTRIAL BOARD OF THE DEPARTMENT OF LABOR
AND INDUSTRY INSTITUTES STATE-WIDE CAMPAIGN
FOR THE ESTABLISHMENT OF SAFETY COMMITTEES TO
REDUCE ACCIDENTS.**

A State-wide campaign, for the establishment of safety committees in all the industries and in every labor organization of the State, is being conducted by the Industrial Board of the Department of Labor and Industry. This plan to reduce the toll of industrial accidents in Pennsylvania, which, during the first six months of this year, resulted in the killing of 954 workers and in the injuring of

100,287 others, will be vigorously conducted by Otto T. Mallery and William Young, Members of the Board, designated by Commissioner John Price Jackson as a committee for the promotion of this work.

Mr. Young, who is president of the Philadelphia Typographical Union No. 2, and represents labor on the Industrial Board of the State, will bring the safety campaign to the attention of the labor unions in Pennsylvania and Mr. Mallery will further the work among the heads of industrial plants. At the last annual meeting of the Pennsylvania Federation of Labor, action was taken endorsing the plan to form safety committees in every local union.

The duties of the members of these safety committees will be to study safety methods and to urge their fellow workmen to follow methods approved by each safety committee and to assist in organizing other safety committees.

The safety committee of each local union will study the Safety Standards of the Industrial Board, applicable to the occupation of the members of each union, and make suggestions for improvement of existing standards and for the formulation of new standards.

THE IMPORTANCE OF THE PREVENTION OF INDUSTRIAL ACCIDENTS AND OCCUPATIONAL DISEASES.*

I am most deeply appreciative of the honor which you have conferred upon me in asking me to address you upon the subject of "The Importance of the Prevention of Industrial Accidents and Occupational Diseases." I am sure that you all appreciate that the subject is a large one and the time for its presentation is short; therefore if my remarks seem abbreviated please pardon me.

At a recent International Congress on Hygiene there was a sign which made a deep impression. It read:—

Inspected, ...	Hogs.
Protected	Forests.
Neglected, ...	Children.

This sign was incomplete, for to it there should have been added: Tolerated.....Human suffering and loss of life through accidents, occurring upon our highways, in the operation of our railroads, both steam and electric, in industry and by trespassing upon the right of way of railroads.

*Address by Francis D. Patterson, M. D., Chief, Division of Industrial Hygiene and Engineering, Department of Labor and Industry of Pennsylvania, before the Bradford County Medical Society at Towanda, March 7, 1916.

It will be my effort to impress upon you that this toleration must be replaced by conservation, that this needless sacrifice of health and in many cases even of life itself must be stopped. The paramount importance of human conservation is indisputable and if one would emphasize it, one has only to remember that the deaths due to preventable accidents and diseases represent a yearly economic loss to the community at large (if human sorrow ever can be expressed in the sordid terms of dollars and cents) which is greater than one billion, five hundred million dollars. Can we wonder that we are called a prodigal and a spendthrift nation?

It has been truly said that our factories and our transportation lines have run red with the blood of innocent victims. The railroad train which carries our goods and our persons is a modern juggernaut which has often left suffering and death in its path. The trolley car, which brings the workman from his home in the suburbs to his place of employment in the city almost hourly runs down the child at play in the streets. The auto-ambulance, speeding on its errand of mercy, has laid low more than one citizen, who, in his haste, had forgotten to stop, look and listen before crossing the highway. The printing press in spreading knowledge has often mangled its pressman. The shop where our clothing is made, takes its toll of the garment worker. The farmer in his fields, toiling early and late to produce our food, works with machinery more dangerous than factory machinery and with less attention paid to devices to prevent accidents. Even the factory where the casket is made, which is our final resting place from this life of toil, takes its toll from the worker and plays its part in the appalling sum-total of injuries.

The statistics of accidents upon our railroads simply emphasize that the term "Modern Juggernaut" is not a misnomer for the average daily toll, based on the reports of the Interstate Commerce Commission, is twenty-seven persons killed and 235 others injured every day. Some of these are trespassers, who, contrary to the general opinion are not "hoboes" or "yegg men;" instead, they are wage earners of the neighborhood where the accident occurs, and it has been estimated that more than four-fifths of them are under the age of eighteen years.

Thirty-five states have no law which specifically prohibits persons from walking upon the railroad right of way, and Pennsylvania is one of these states. We need such a law upon our statute books. We need a public sentiment which will insure the enforcement of such a law, and every person in our land should realize that the taking of a short cut along the railroad right of way may be the shortest way to either a jail, a hospital or a morgue.

From the important standpoint of sanitation, there is a sin of omission which seems common to all railroads, the pollution of their right of way, and one can conceive of our commonwealth in the throes of a serious epidemic due to the travels of a "Typhoid Mary."

Several years ago I had occasion to make an analysis of the accident problem of the railroads and at that time found there were a good many of the larger railroad systems whose methods of physical examinations were not of the best; in fact, three of them made absolutely no tests for color blindness.

"Safety appliances require safe men to operate them," is an axiom too often disregarded by the management of American railroads. The most modern form of block signal system is of no possible protection to any train at night when a color-blind engineer is at the throttle, or at any time, if the engineer is lifeless in his cab, from some disease the presence of which would have been determined by a thorough physical examination.

The accidents of industry make a gruesome group of statistics and the problem is so serious that means for its solution must be found. Pennsylvania is the greatest industrial commonwealth in the world, but the cancer of industrial accidents is gnawing at its very vitals.

The passing of time has seen a great change in our industrial structure; the small shop with its few employes has been replaced by vast mills with thousands of workers. These changed industrial conditions have demanded at the hands of the legislators new legislation to meet them. Progressive manufacturers, tired of the freedom with which juries in personal injury litigations dispensed other people's monies; organized and unorganized labor, finding that but few personal injuries were paid for because of the three common law defences of contributory negligence, assumption of risk and negligence of a fellow servant; and the inhabitants of the state at large, upon whom the burden of a proportion of industrial accidents has fallen, all were a factor of influence in the passage of what are termed "The Compensation Laws."

The need for them is only emphasized by the gruesome statistics which tell only a portion of the true story.

In the year 1914 there were reported to the state 38,126 accidents of which 379 ended fatally. Let us analyze more closely, the 1915 report:—

Total number of accidents,.....	61,540
Fatal accidents, ...	1,204
Serious accidents, ...	7,274
Days lost, ...	820,743
Wages lost, ...	\$1,997,024.73
Number of dependents, ...	75,444

Certain groups of occupations are very hazardous for we find in the "metal products" there were 25,094 accidents of which 212 were fatal; in the public service, such as railroads, etc., there were 16,919 accidents of which 51 were fatal and in the mines and quarries there were 13,955 accidents of which 749 were fatal.

The record for the first two months of this year is simply appalling, in January there were reported 13,465 accidents of which 129 were fatal; in February 24,475 accidents, of which 222 were fatal, or a total for the two months of 37,940 accidents of which 351 were fatal.

The condition is even more serious than is indicated by these figures for they only represent about three-fourths of the accidents that occur, the other one-quarter not being reported to the State as the law requires that they should be.

If this average is kept up for the rest of the year, it will mean at least a total of 300,000 accidents of which nearly 2,000 will be fatal, and the economic loss to this Commonwealth will be in excess of \$400,000,000, if human sorrow and suffering can ever be measured in dollars and cents.

It would seem to be an axiom that to attract attention a tragedy must be dramatic. It seems but yesterday that the civilized world stood aghast when the "Titanic," with her name of ill omen, crashed into an iceberg and some 1,500 souls perished amidst the ice floes. Countless columns of every newspaper were devoted to every phase of the horror and an ever-generous public subscribed more than \$2,000,000 for the relief of those made dependent by the catastrophe. To-day the newspapers teem with the annals of that crimson horror that stains the fair fields of France, but the vastly greater number of persons who are either maimed or killed by industry every month passes practically unnoticed by both press and public.

Let us pause—and think—if these 37,940 accidents, of which 351 were fatal, all occurred in one town at the same moment, the world would ring with the news and there would be a demand from all over this country that such slaughter must be stopped, but occurring as they do, one at a time or in small groups, they have not excited the comment that their importance demands.

War and industry each makes an appalling total of casualties which should cry out to Heaven in clarion tones for international peace and industrial safety; each takes the very flower of the nation, for the majority of injured are between the ages of twenty and forty years, in other words, the period of greatest productive power, both mental and physical.

Causes of Industrial Accidents.

(1) Unguarded dangerous machinery. (2) Ignorance of employes as to dangerous conditions. (3) Doing work unsafely. (4) Recklessness and taking chances. (5) Speeding up. (6) Fatigue.

How to Prevent Accidents.

We are to-day in an era of legislation, both state and national, but it must not be forgotten that it is no more possible to prevent all accidents by mere law than it is to control the tides of the sea by that same process, and we all remember the result of that experiment.

Laws and governmental inspections can and do make work places safer but what is really needed is not more laws to clutter up the over-filled statute books, but an awakening of public conscience, a development of human responsibility and a realization by all that the answer is most emphatically *yes* to that query that has run down the ages, "Am I my brother's keeper?"

All dangerous machines, all gearing, all belting that comes close to the floor should be guarded, and these guards will in themselves prevent twenty-five per cent. of the accidents. For a machine to be safe, however, it must be operated by a safety man. And safety men, men who know the importance of doing their work safely and who are as thoughtful of the safety of others as they are of their own safety, are those who have been so educated that they have acquired the "safety habit," which by the way is the only habit which never injured anyone.

The prevention spirit is just as important as the safety device. The unused safety device is of no more value than the good intentions which are said to pave the lower regions. An ounce of prevention in using the guard is far better than many pounds of anti-septic dressing or other cure for lacerated flesh.

Guards are essential, but more so is education. The day is happily past in many plants where a man is simply hired at the gate and put to work; instead, he is put in charge of an experienced man who instructs him how to do his work safely and who also warns him of any dangers that may exist, and he stays with the man until he is thoroughly trained to do his work safely.

Each plant should have its safety organization, consisting of a safety inspector, a workmen's safety committee in each shop, a foremen's safety committee and a general safety committee who should see that proper mechanical safeguards are installed, investigate all accidents and help in the educational campaign.

All employes should be encouraged to make suggestions for improving safety and sanitation. Co-operation and harmony are essential and all should work together, for is not the safety of one the safety of all?

Physical examination of applicants for employment and of old employes at a yearly interval is an essential feature of successful accident prevention. It ensures to the employe the correction of physical defects and that his coworkers are healthy. It ensures to the manufacturer a knowledge as to the physical condition of his most important raw material, his human labor, and why, when an inventory is taken once a year of all other material should not this most valuable material be also included?

Our Commonwealth owes a debt of gratitude to Governor Brumbaugh for having given to it the best child labor law of any state. This law went into effect on January 1 of this year and has as its characteristic four most important features:—

First: The employment certificate; this is not given to the child but instead is sent by the school authorities to the employer who returns it to the school authorities when the employment is terminated and so both the employer and the school authorities have the child under their supervision.

Second: Physical examination; the child must be physically examined and must conform to certain physical standards before a certificate may be issued which assures that the child can not labor beyond its strength.

Third: The nine-hour day; the law reduces the hours of labor per day to nine and per week to fifty-one, and it is to be hoped that this will be eventually reduced so that the maximum hours for labor for children between fourteen and sixteen years of age will be eight hours per day and forty-four per week. The eight hours allowed for school must be included in this fifty-one hours per week and nine hours per day. Minors under the age of sixteen years can not be employed before six in the morning or after eight in the evening. No child under the age of fourteen years may be employed in any establishment of any kind and no male child under the age of twelve years and no female under twenty-one years of age may sell newspapers, magazines or merchandise of any kind, in any street or public place, and no male child under fourteen years of age and no female under twenty-one years of age may work in any street or public place at any trade or occupation, such as boot-blackening, etc.

Fourth: Continuation schools; all children between the ages of fourteen and sixteen must attend continuation schools for eight hours per week, which will be of very material benefit to the child, to the industries and to the Commonwealth at large.

The Vocational Diseases.

Hand in hand with the prevention of industrial accidents is the importance of the prevention of occupational diseases. Lead being the most widely used poison in industry with more than one hundred and thirty trades subjected to its hazard, it is only proper that the State should throw the protecting cloak of law about those who labor in it and so we have the Lead Poisoning Act of 1913. This is the only vocational disease which is at this time reportable to the State.

This entire subject of vocational disease is just commencing to attract the attention of investigators; eminent authorities find it difficult to define the terms "occupational disease" so that the definition will not be even more obscure than some of the diseases which it includes.

There is only one vocational disease which has a pathognomonic symptom and I of course refer to caisson disease. The nitrogen bubbles in the cord and other tissues can not be simulated by any other condition. The anemia of lead poisoning does not differ an iota from the anemia due to many other conditions, and so I might go on with the symptoms of innumerable other diseases.

We are at this time actively investigating some of these conditions, the textile industry and its relation to the health of those employed therein, the ill effects of extreme light (as in the steel industry) upon vision, the relations of extreme heat to the efficiency of the worker, etc. We know that dust and fumes are the curses of modern industrial life and every effort of the department is constantly being made to reduce them at least to the minimum if they can not altogether be eradicated.

We must enlist the co-operation of every inhabitant of this great Commonwealth in a campaign to prevent industrial accidents and vocational diseases. This campaign stands for human conservation, than which there is nothing more important on the face of the earth, for the elimination of the "chance taker," who is the maker of cripples, widows and orphans, for safety men as well as for safeguarded machinery, for the increase of human happiness, for good health and for prosperity.

SALE OF STEAMSHIP TICKETS IN PENNSYLVANIA UNDER SUPERVISION OF BUREAU OF EMPLOYMENT OF DE- PARTMENT OF LABOR AND INDUSTRY.

According to Act 397, Section 19, the Commissioner of Labor and Industry is invested with the duty of enforcing all laws pertaining to the sale of steamship tickets. A portion of this section reads as follows:

“The Commissioner shall enforce all laws pertaining to the sale of steamship tickets or orders for transportation; and prescribe rules and regulations for the protection of the purchasers in the purchase of and cancellation of third-class or steerage tickets, or orders for transportation.”

This portion of the law is contained in a section, the title of which is “Protection to Aliens” and while the result of its being put into force will mean protection to the general public, its real value will be to the foreigner who is ignorant of our language and customs, and therefore at the mercy of the unscrupulous.

The laws of Pennsylvania require that steamship ticket agents should have in their possession certificates of authorization, presented to them by the company for which they are authorized to sell tickets. It was found by investigators of the Department that this law was not generally understood and that only a very small proportion of the number of Pennsylvania agents had certificates to show their authority.

The duty of seeing that this law was obeyed was given by the Commissioner of the Department of Labor and Industry into the charge of the Director of the Employment Bureau of that Department. Letters to all steamship companies, having agents in Pennsylvania, were sent out by the Director, during the latter part of May. These companies each received extracts of the Pennsylvania laws pertaining to the sale of steamship tickets and were asked to comply with the law, by sending to all their Pennsylvania agents, certificates showing that the latter were duly authorized to represent these companies. A standard certificate form was recommended by the Commissioner and the Director. This form proved acceptable to all the companies, and they willingly printed them at their own expense.

A copy of the extracts from the Act of May 6, 1863, concerning steamship tickets is printed herewith.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF LABOR AND INDUSTRY

Bureau of Employment—Division of Immigration

Act of May 6, 1863, Pennsylvania Laws 582, Relating to the Sale of Steamship
Tickets or Orders for Transportation, as Amended.

Section 1. Ticket agent to have certificate of authority. It shall be the duty of the owner or owners of any railroad, steamboat, or other conveyance for the transportation of passengers, to provide each agent, who may be authorized to sell tickets, or other certificates, entitling the holder to travel upon any railroad, steamboat, or other public conveyance, with a certificate, setting forth the authority of such agent to make such sales; which certificate shall be duly attested by the corporate seal, if such there be, of the owner of such railroad, steamboat, or other public conveyance; and also by the signatures of the owner, or officer, whose name is signed upon the tickets or coupons which such agents may sell.

Section 2. No person without authority to sell tickets. It shall not be lawful for any person, not possessed of such authority, so evidenced, to sell, barter, or transfer, for any consideration whatever the whole or any part of any ticket or tickets, passes, or other evidences of the holder's title to travel on any railroad, steamboat, or other public conveyance, whether the same be situated, operated, or owned within or without the limits of this Commonwealth.

Section 3. Violation of Act a misdemeanor. Any person or persons, violating the provisions of the second section of this Act, shall be deemed guilty of misdemeanor, and shall be liable to be punished by a fine, not exceeding five hundred dollars, and by imprisonment not exceeding one year or either or both, in the discretion of the court in which such person or persons shall be convicted.

Section 4. Ticket agent to show certificate on request. It shall be the duty of every agent, who shall be authorized to sell tickets, or parts of tickets, or other evidences of the holder's title to travel, to exhibit to any person desiring to purchase a ticket, or to any officer of the law who may request him, the certificate of his authority thus to sell, and to keep said certificate posted in a conspicuous place in his office, for the information of travellers.

Section 5. Companies to provide for redemption of unused tickets. It shall be the duty of the owner or owners of railroad, steamboat, and other public conveyances, to provide for the redemption of the whole, or any parts or coupons, of any ticket or tickets, as they may have sold, as the purchaser, for any reason, has not used, and does not desire to use, at a rate which shall be equal to the difference between the price paid for the whole ticket, and the cost of a ticket between the points for which the proportion of said ticket was actually used.

Sale of unused portion of ticket prohibited. The sale, by any person, of the unused portion of any ticket, otherwise than by the presentation of the same for redemption, as provided for in this section, shall be deemed to be a violation of the provisions of this Act, and shall be punished, as is hereinbefore provided.

This Act shall not prohibit any person who has purchased a ticket from any agent authorized by this Act, with the bona fide intention of travelling upon the same the whole distance between the points named in the said ticket, from selling the unused part of the same to the company that sold the same; and it shall be the duty of the said company to pay for such unused portion of ticket the difference between the actual fare to point used, and the amount paid for such ticket.

Steamship Companies Co-operating.

The manner in which the steamship companies have co-operated with the Department has been exceedingly gratifying. They have shown great willingness to comply with the law concerning certificates, and have been entirely willing to use the standard form suggested to them. It is evident that these companies have seen the value of the certificates in protecting the public, and in increasing the confidence of the public in the regularly authorized agents. This benefit has evidently outweighed the expense of having hundreds of the certificates printed and distributed, for there has been no hesitation on the part of the companies in their compliance and no complaints. A number of the companies have already distributed certificates to all of their agents, and the others are sending them out rapidly. At the present time, almost 3,000 certificates have been distributed by ten companies alone.

After the agents have received their certificates, they will be notified that these are to be posted in a conspicuous place in their offices, for the information of travelers. Investigators of the Department of Labor and Industry will make personal visits to the agents to see that the law is complied with, and will receive and assist in adjusting complaints made to them by purchasers of tickets. It is hoped by these methods to correct many abuses of individuals who are not authorized to sell tickets, and who take advantage of those who are ignorant of the correct methods and rates.

BUREAU OF INSPECTION OF THE DEPARTMENT OF LABOR AND INDUSTRY ENGAGED IN THE ENFORCEMENT OF THE ELEVATOR AND BOILER CODES WHICH BECAME EFFECTIVE JULY 1, 1916.

Inspectors of the Department of Labor and Industry, through the divisions of elevator inspection and of boiler inspection, are making inspections throughout the State to enforce the provisions of the elevator and boiler codes adopted by the Industrial Board of the

Department of Labor and Industry. The force of department inspectors is augmented by inspectors of casualty insurance companies and by individual inspectors of boilers who passed examinations held by the Department of Labor and Industry in Pittsburgh, Philadelphia and Harrisburg. These examinations were taken by 252 men, of whom 104 qualified as elevator inspectors and 118 as boiler inspectors. Inspectors holding certificates from Ohio and Massachusetts were accepted as qualified by the Department without the necessity of taking the examinations. Applicants who successfully passed the examinations were given commissions by the Department of Labor and Industry and were designated as approved State inspectors. All reports from these qualified auxiliary inspectors will be examined in the Labor Department and all faulty conditions reported will be investigated.

This procedure is expected to bring the inspection of boilers and elevators to a standard never before attained in this State and one that will aid greatly in safeguarding the lives of workers and the public. The examinations were prepared by a committee of experts who attended the examinations and personally examined the papers. The past records of the applicants were also investigated to make sure that the men qualified would be thoroughly efficient.

The Boiler Code, adopted by the Industrial Board is the standard code of the American Society of Mechanical Engineers. The Industrial Board has also adopted rules of administration governing the inspection of boilers within the State. These rules appear in the final pages of this issue of the Bulletin.

In the campaign to increase the safety of elevators, within the State, the following letter has been sent, by the Commissioner of the Department of Labor and Industry, to companies installing elevators in Pennsylvania:—

Subject: Hatchway Interlocks.

Pennsylvania Elevator Companies,

Gentlemen: During the past winter the Division of Elevator Inspection was created in the Bureau of Inspection of the Department of Labor and Industry for the purpose of giving special attention to improving elevator safety throughout the State. Many people associated with the manufacturing of elevators co-operated with us in developing this Division.

Our elevator inspectors have now had a chance to survey a good deal of elevator work in the State, and found a great many machines without mechanical interlocks on the elevator doors. Mechanical interlocks are required by the Industrial Board of the Department. Elevator owners are notified by our inspectors and given a suitable time for their installation.

We find, however, another large and more insidious cause of danger, namely, the purely electrical contact method of preventing the operation of the elevator while the door is open. This contact method, which does not include a mechanical interlock, has resulted in a number of tragedies which could not have happened had the mechanical interlock been used. The use of this ineffective and unreliable electrical contact device has further been a potent cause of retarding installations of a proper kind of mechanical interlock and, thus, has held back the best development of safety on passenger elevators.

By reason of the fact that the Industrial Board rule unequivocally demands the use of mechanical interlocks, and also by reason of our knowledge of your desire to aid in improving safety conditions, I am bringing this matter to your attention. I ask you not only yourself to comply with the legal ruling of the Industrial Board, but to use your influence to eliminate the use of illegal and dangerous substitutes.

Thanking you for your hearty co-operation, I beg to remain,

Yours faithfully,

JOHN PRICE JACKSON,
Commissioner.

General Inspection Work.

The general inspectors of the Department have been continuing their inspections of school buildings, public buildings, foundries, canneries and other establishments in their districts, with the result that many instructions are being issued, and the returns from these instructions are coming in much more promptly than before.

It has been deemed advisable to issue, to inspectors, circular letters on the subjects of set screws and metal belt lacings. It was found that a number of injuries had recently been reported from industrial plants due to projecting set screws. The restrictions on metal belt lacings seemed to be rather vaguely understood throughout the State, and for that reason the explanatory circular was sent out. Both of these points are apparently small ones, but both productive of injuries.

One of the principal objections raised, in the matter of set screws is that of the proprietor who says: "It isn't necessary to remove that set screw; no one ever goes up there." This being in reference to overhead shafting. As an example of an answer to such argument an actual case may be cited.

An inspector requested the removal of a projecting set screw in a shaft some twelve feet above the floor. The proprietor of the shop took occasion to criticize the order and the inspector's ability

in a letter to the central office, stating that no one ever worked around this shaft. One week later an oiler was caught on this identical set screw and whirled to death by the rapidly moving shafting. The proprietor learned a lesson, but it was then too late.

The circular letters, sent to inspectors, on the subject of set screws and metal belt lacings, are as follows:

Circular No. 107.

Subject: Set Screws.

Inspectors: Recently there has come to my attention the report of several accidents, caused by protruding set screws.

In view of this fact I am again calling the attention of our Inspectors to this particular hazard in an endeavor to impress upon them the necessity of a more careful inspection of all shafting and the rigid enforcement of the Industrial Board ruling on set screws to the end that accidents from this source will be entirely eliminated.

Irrespective of location, all protruding set screws in moving parts of machinery, when exposed to contact, *shall* be removed and replaced by flush set screws.

This is a very simple but important request and I trust you will, in future, give this matter the careful attention it deserves. Any accidents occurring in your district from this cause will certainly be a reflection on the quality of your inspection.

Believing that we can count on your co-operation in this matter, I beg to remain,

Very truly yours,

LEW. R. PALMER,

Chief, Bureau of Inspection.

Approved:

JOHN PRICE JACKSON,
Commissioner.

Circular No. 111.

Subject: Metal Belt Lacings.

Inspectors: Referring to the matter of rawhide lacings required in certain belts, by Industrial Board Safety Standards on Power Transmission, I note that there has been some apparent misunderstanding of the exact interpretation of this section.

I am, therefore, writing to advise that the interpretation of Section V-I.671, which reads, "Hereafter no change belts shall be laced with metal," should be construed with the following interpretation of the Industrial Board, which reads, "It is the intent in drafting this particular regulation to prohibit the lacing with metal of any

belt which it is possible to shift by hand. It is understood that any mechanical shifting apparatus, which prevents the human hand coming in contact with the belt at all times, would be permissible if laced with metal."

Therefore, it will be seen that belts which are not shifted by hand will be permitted to have metal lacings.

I trust that this point is now clear to you all, and beg to remain,

Very truly yours,

LEW. R. PALMER,

Chief, Bureau of Inspection.

Approved :

JOHN PRICE JACKSON,
Commissioner.

Division of Building Inspection.

Plans and specifications for stores and apartments, theatres, motion picture theatres, factories, schools, mercantile and other buildings and fire escapes are reaching the Department of Labor and Industry in large numbers and are having the prompt and careful consideration of the inspectors in the building division, as well as the Chief and Supervisors of the Bureau.

During the month of May, eighty-four sets of plans were received and acted upon; of which sixty-one sets were approved and forwarded to the inspectors throughout the State, to be passed on to the owners, contractors, or architects when the requirements of the Department were complied with. The remaining twenty-three sets of plans have either been returned for reason of insufficient information or they did not conform to the requirements of the Department.

Architects, contractors and builders throughout the State are rapidly awakening to the fact that it is not merely a matter of complying with the State law, to submit building plans to this Department, but a saving of money to the owner in the construction of the building. To have a building partially or nearly completed and to be informed that it does not conform to the requirements of an Act of the State Legislature, is both annoying and expensive, besides the loss of time in the alteration of the building.

Section 5 of Act 233 is very clear on this point, that plans and specifications must be submitted to the Department of Labor and Industry at Harrisburg before proceeding with the adaptation or erection of any building or fire escape coming under the provisions of this Act dated May 3, 1909.

Many a helpless female or child may be saved by unobstructed passageways in a building which mean a matter of a great many minutes saved. A child may burn to death while the firemen are trying to force a door.

In planning motion picture theatre buildings it is important that this Department be consulted immediately after the site is selected, or better still, before the site is selected, in order that valuable suggestions may be made by men in the Department familiar with all of the details of this kind of a building. The principal items to be considered are: the location of building on the lot, arrangement of exits, aisles, seats, etc., the system of ventilation, heating, lighting, etc., and the materials of construction.

It is in the theatre building that the greatest danger exists, due to nervous tension of the occupants, caused by watching exciting pictures and while in this state of mind a very little thing will cause a panic. It is therefore essential that the above mentioned items are carefully considered in the construction of a new theatre.

It has been the experience of this Department that a great many architects do not clearly understand the object of the Act requiring two separate means of egress in the buildings specified, and the required number of exits from theatres. The owner of a building presenting the safest conditions has the warmest welcome for the Department inspector. The intention of articles of this kind is to educate the public along this line. Once the public gets away from the thought that the State is imposing a hardship, the better conditions will be and the more willing the public will be to submit plans to the Department of Labor and Industry for examination.

Upon presentation, the plans are given careful and conscientious examination and consideration by a corps of trained and skilled architects and engineers. Every detail is considered in the arrangement of the structure as to hazard from fire, sanitation, ventilation, lighting and particularly that the means of egress are adequate and sure.

It is a matter of great relief to the occupant of the top floor of a five-story apartment house to know that he has the choice of at least two separate and distinct passageways to the street in case of fire or panic and that both are safe and unobstructed at all times.

It is very important that the means of egress are so arranged that both can not be closed either by smoke or flame at the same time. The location of the passageways and stairways in the building is, therefore, the first for consideration in planning a structure.

It is equally important in placing a fire escape upon a building that it is at the most advantageous point with regard to hallways, passageways and stairs and that the rooms which it is intended to relieve will be afforded the two separate means of egress located as near as practical at opposite ends of rooms. The means of egress must, in all cases, be separate and lead by means of two distinct stairways or passageways direct to street.

Presuming an entire building not to be afire at one time, or at least, before the occupants could be warned, therefore should one stairway be shut off by fire they would have the other avenue to turn to for safety.

It is well to consider in making plans that the exterior doors be arranged to open outward and in fact all doors where possible should open outward or in the direction of the flow of people from the building.

The following letter has been sent to the manufacturers of fire escapes:

Subject: Specifications for Fire Escapes.

To Manufacturers of Fire Escapes:

On and after April 15th, 1916, the Department of Labor and Industry will require that all plans for fire escapes be accompanied by floor plans of each floor to be protected.

These floor plans must show halls, passageways, stairways and proposed location of the fire escape. The elevation of the fire escape to be shown on the elevation of the buildings.

These elevations are to show all windows, and those coming within the scope of Act No. 190 are to be shown with metal frames and wire glass. These are to be indicated by shading. All exit openings shall be according to Act No. 190, by fireproof doors opening at floor level.

Should a balanced terminal section be required, it must be of the back counter-balanced type and so shown on the plans.

FATALITIES IN PENNSYLVANIA'S INDUSTRIES AGGREGATED 954 DURING THE FIRST FIVE MONTHS OF 1916, AND 100,287 WORKERS WERE INJURED DURING THE SAME PERIOD ACCORDING TO CLASSIFICATION OF ACCIDENT REPORTS MADE BY THE BUREAU OF STATISTICS AND INFORMATION OF THE DEPARTMENT OF LABOR AND INDUSTRY.

Sixty-one regiments of workers were wounded in the industries of Pennsylvania during the first five months of 1916. More men than would complete one-half the enrollment of a war strength regiment were killed during the same period.

Data compiled by the Bureau of Statistics and Information of the Labor Department indicates that 954 workers were killed in Pennsylvania industries between January 1, and June 1, 1916, and 100,287 others injured. The total of killed and wounded reaches 101,241.

Counting approximately 1,600 men to a regiment, on a war strength footing in the United States Army, one can realize that the same number of fatalities as occurred in Pennsylvania's mines and factories during the first five months of this year would annihilate more than half a regiment.

The workers injured outnumber the entire regular army of the United States. If every man of the regular army, along the Mexican border, had received a wound in battle the aggregate number of wounded would not equal the roster of those wounded in the mills of Pennsylvania during the first 152 days of this year. An average of 191 workers were killed every month during the first five months of the year and an average of 20,248 were injured each month. This terrific loss can be greatly reduced by carefulness and thoughtfulness by both employer and employe.

One hundred and forty-nine workers were killed in January, 227 in February and 251 in March according to classifications of fatal accidents which appear on following pages. The remainder of the fatalities, occurring in April and May are now being classified.

Fatalities occurred in 36 of the 67 counties of the State in January; in 38 counties in February and in 43 counties in March. In January, 82 of the fatalities occurred in mines, 51 in various industrial plants and 16 in public service work. In February, 126 fatalities were in mines, 70 in other industrial plants and 31 in public service work. In March, 117 were mine fatalities, 86 industrial and 48 public service. The greatest number of fatalities in January, 47, occurred in anthracite mines. In February the greatest number of fatalities, 64, were in bituminous mines; while in March the greatest number of fatalities, 68, again occurred in anthracite mines. During the three months four men were killed in powder mills. One victim, in January, was killed by being caught in machinery while two killed in February and one in March lost their lives in explosions.

One hundred and three of the total number of victims, killed in January were married, leaving 211 dependents; one hundred and sixty-two of the victims in February were married leaving 209 dependents and 160 of those killed in March were married leaving 274 dependents.

Luzerne county, with its anthracite mines, led the death list in the January classification with 20 fatalities; Allegheny county was second with 17, Philadelphia county third with 16. In February, Indiana county, in the bituminous regions, led the list with 30 fatalities; Luzerne was second with 29 and Allegheny third with 28. In March, Allegheny led with 40 fatalities, Luzerne was second with 33 and Schuylkill third with 23. The complete classification follows:—

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of January, 1916—Continued.

INDUSTRIES.	CAUSE.										NATURE OF INJURY.			
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Ingot, iron and steel, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Iron, pig, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Machinery and parts, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nails and spikes, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pipes and tubing, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Plates, iron and steel, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shapes, structural, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Smelting and refining, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ore, iron, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stone, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Coal, anthracite, ...	2	8	24	1	1	8	1	1	1	4	3	20	3	17
Coal, bituminous, ...	1	3	16	1	1	9	1	1	1	2	1	13	2	11
Public service, ...	1	1	1	1	1	9	1	1	1	3	1	8	1	2
Miscellaneous, ...	1	1	1	3	1	4	1	1	1	1	1	5	1	2
Hotels and restaurants, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Totals, ...	17	18	49	11	1	39	1	1	1	14	6	67	8	40

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of January, 1916—Continued.

Industries.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			Total.	COUNTIES.	Fatal Accidents by Counties.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.		Single.	Industrial.	Mines.					Public service.
Electrical construction, ...				2	1	.....	2	.....	1	2	.....	2	Allegheny, .....	.....	17	
Roofing and sheet metal work, ...					1	.....	1	.....	3	1	.....	1	Armstrong, .....	.....	8	
Structural iron work (erecting), ...					1	.....	1	.....	4	1	.....	1	Beaver, .....	.....	1	
Glue and gelatin, ...					1	.....	1	.....	1	.....	.....	.....	Berk, .....	.....	1	
Oils, essential, ...					1	.....	1	.....	.....	.....	.....	.....	Bradford, .....	.....	2	
Powder and other explosives, ...					1	.....	1	.....	5	.....	.....	.....	Cambria, .....	.....	11	
Brick, ...				1	2	.....	1	.....	.....	2	.....	2	Carbon, .....	.....	2	
Cement, ...					1	.....	.....	1	.....	.....	.....	.....	Chester, .....	.....	2	
Glass, plate, ...					1	.....	1	.....	.....	.....	.....	.....	Clearfield, .....	.....	1	
Hosiery and knit goods, ...						1	.....	.....	.....	.....	.....	.....	Crawford, .....	.....	1	
Ice, ...					1	.....	1	.....	.....	.....	.....	.....	Dauphin, .....	.....	1	
Slaughtering and Meat Packing, ...					1	.....	1	.....	.....	.....	.....	.....	Delaware, .....	.....	1	
Leather, tanned, curried, finished, ...				1	1	.....	.....	1	.....	.....	.....	.....	Elk, .....	.....	1	
Liquors, malt, ...				1	1	.....	.....	1	.....	.....	.....	.....	Erie, .....	.....	1	
Lumber and timber products, ...				2	2	.....	2	.....	1	2	.....	2	Fayette, .....	.....	1	
Curtains, ...					1	.....	.....	.....	.....	.....	.....	.....	Franklin, .....	.....	1	
Billets, blooms and slabs, ...					1	.....	2	.....	15	7	.....	17	Huntingdon, .....	.....	1	
Boilers, tanks and stacks, ...					1	.....	1	.....	.....	.....	.....	.....	Indiana, .....	.....	1	
Castings, iron and steel, ...					2	.....	2	.....	5	2	.....	2	Lackawanna, .....	.....	1	
Engines, railroad, ...					1	.....	1	.....	.....	.....	.....	.....	Lancaster, .....	.....	1	
Firearms and ammunition, ...					1	.....	1	.....	.....	.....	.....	.....	Lawrence, .....	.....	1	

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of January, 1916—Continued.

INDUSTRIES.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		CLASS.			COUNTIES.	Total.			
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.	Single.	Number of dependents.	Industrial.			Mines.	Public service.	
Ingots, iron and steel, ...					1	.....	1	.....	2	1	.....	.....	Lehigh, ...	1	3
Iron, pig, ...					1	.....	2	.....	1	2	.....	.....	Luzerne, ...	2	20
Machinery and parts, ...					1	.....	.....	.....	.....	1	.....	.....	Lycoming, ...	1	2
Nails and spikes, ...					1	.....	.....	.....	.....	1	.....	.....	Montgomery, ...	1	1
Pipes and tubing, ...					1	.....	.....	.....	.....	1	.....	.....	Northampton, ...	1	4
Plates, iron and steel, ...					1	.....	.....	.....	.....	1	.....	.....	Northumberland, ...	1	1
Shapes, structural, ...					1	.....	.....	.....	.....	1	.....	.....	Philadelphia, ...	2	16
Smelting and refining, ...					1	.....	.....	.....	.....	1	.....	.....	Pike, ...	1	1
Ore, iron, ...					1	.....	.....	.....	.....	1	.....	.....	Schuylkill, ...	1	10
Stone, ...					3	.....	2	.....	.....	3	.....	.....	Snyder, ...	3	10
Coal, anthracite, ...					47	.....	30	17	68	.....	.....	.....	Somerset, ...	47	1
Coal, bituminous, ...					31	.....	20	11	55	.....	.....	.....	Venango, ...	31	1
Public service, ...					16	.....	13	3	21	.....	.....	.....	Washington, ...	16	7
Miscellaneous, ...					9	.....	5	4	.....	.....	.....	.....	Wayne, ...	9	2
Hotels and restaurants, ...					1	.....	1	.....	3	.....	.....	.....	Westmoreland, ...	1	3
Totals, ...				28	148	1	103	46	211	51	82	16	.....	149	149

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of February, 1916.

Industries.	CAUSE.										NATURE OF INJURY.			
	Machinery.	Explosives, electricity, fires and hot corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Brick, cement and stone work, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Building construction, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemicals, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oils, essential, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Powder and other explosives, .....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brick, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cement, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pottery, terra cotta and fire clay products, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shirts, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather, sole, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Trunks and suit cases, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Planing mill products, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paper goods not specified, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woolen, worsted and felt goods, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bars, iron and steel, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Billets, blooms and slabs, ...	4	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cars and car wheels, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Castings, iron and steel, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fire escapes, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Iron, pig, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of February, 1916—Continued.

Industries.	CAUSE.								NATURE OF INJURY.					
	Machinery.	Explosives, electricity, fires and hot corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Machinery and parts,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saws, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shapes, structural, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tin andterne plate, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wire products, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ore, iron, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Slate, other than roofing, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stone, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stone, crushed, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal, anthracite, ...	1	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal, bituminous, .....	.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public service, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hotels and restaurants, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jobbers and wholesalers, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Municipalities, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, ...	17	52	61	20	2	49	.....	.....	.....	26	12	86	13	49

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of February, 1916—Continued.

Industries.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			Total.	COUNTIES.	Fatal Accidents by Counties.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.		Single.	Industrial.	Mines.					Public service.
Brick, cement and stone work, ...					1	.....	1	.....	2	1	.....	1	Allegheny, .....	.....	28	
Building construction, ...					3	.....	3	.....	3	3	.....	3	Armstrong, .....	.....	3	
Chemicals, ...					1	.....	1	.....	.....	.....	.....	.....	Beaver, .....	.....	2	
Oils, essential, ...					2	.....	.....	.....	.....	.....	.....	.....	Blair, .....	.....	1	
Powder and other explosives, ...													Bradford, .....	.....	1	
Brick, ...					3	.....	2	1	.....	3	.....	3	Butler, .....	.....	10	
Cement, ...					1	.....	1	.....	2	1	.....	1	Cambria, .....	.....	2	
Pottery, terra cotta and fire clay products, ...					1	.....	1	.....	6	1	.....	1	Cameron, .....	.....	3	
Shirts, ...						2	2	.....	9	1	.....	1	Carlton, .....	.....	2	
Ice, ...					1	.....	1	.....	1	1	.....	1	Centre, .....	.....	2	
Leather, sole, ...					1	.....	1	.....	1	1	.....	1	Chester, .....	.....	2	
Trunks and suit cases, ...					1	.....	1	.....	.....	1	.....	1	Chesterfield, .....	.....	2	
Planing mill products, ...					1	.....	1	.....	.....	1	.....	1	Crawford, .....	.....	4	
Paper goods not specified, ...					1	.....	.....	.....	.....	1	.....	1	Dauphin, .....	.....	1	
Woolen, worsted and felt goods, ...										1	.....	1	Delaware, .....	.....	2	
Bars, iron and steel, ...					2	.....	2	.....	2	2	.....	2	Erie, .....	.....	4	
Billets, blooms and slabs, ...				1	15	.....	11	4	15	15	.....	15	Payette, .....	.....	4	
Cars and car wheels, ...				1	3	.....	1	.....	5	1	.....	1	Indiana, .....	.....	30	
Castings, iron and steel, ...					1	.....	1	.....	2	2	.....	2	Jefferson, .....	.....	1	
Fire escapes, ...					1	.....	1	.....	.....	1	.....	1	Lackawanna, .....	.....	1	
Iron pig, ...				2	2	.....	1	.....	.....	2	.....	2	Lancaster, .....	.....	11	

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of February, 1916—Continued.

Industries.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			Total.	COUNTIES.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.		Single.	Industrial.	Mines.				Public service.
Machinery and parts, ...				2	3	.....	.....	1	.....	3	.....	3	Lawrence, ...	1	
Saws, ...					1	.....	.....	.....	.....	1	.....	1	Lebanon, ...	1	
Shapes, structural, ...					1	.....	.....	.....	.....	1	.....	1	Lehigh, ...	4	
Tin andterne plate, ...					1	.....	.....	.....	.....	1	.....	1	Lazerte, ...	29	
Wire products, ...					1	.....	.....	.....	.....	1	.....	1	Lyzoning, ...	2	
Ore, iron, ...					2	.....	.....	.....	.....	.....	.....	2	McKean, ...	2	
Slate, other than roofing, ...					5	.....	.....	.....	.....	.....	.....	5	Mercer, ...	2	
Stone, ...					2	.....	.....	.....	.....	.....	.....	2	Montgomery, ...	1	
Stone, crushed, ...					1	.....	.....	.....	.....	.....	.....	1	Northampton, ...	7	
Coal, anthracite, ...					52	.....	.....	.....	.....	.....	.....	52	Northumberland, ..	9	
Coal, bituminous, ...					64	.....	.....	.....	.....	.....	.....	64	Philadelphia, ...	8	
Public service, ...					31	.....	.....	.....	.....	.....	.....	31	Schuykill, ...	22	
Miscellaneous, ...					12	.....	.....	.....	.....	.....	.....	12	Somerset, ...	11	
Hotels and restaurants, ...					2	.....	.....	.....	.....	.....	.....	2	Susquehanna, ...	5	
Robbers and wholesalers, ...					1	.....	.....	.....	.....	.....	.....	1	Warren, ...	1	
Municipalities, ...					1	.....	.....	.....	.....	.....	.....	1	Washington, ...	2	
Total, ...	67	.....	.....	224	3	162	65	209	70	126	31	227	Westmoreland, ...	6	
Total, ...														227	

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of March, 1916.

INDUSTRIES.	CAUSE.										NATURE OF INJURY.			
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Brick, cement and stone work, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Building construction, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Electrical construction, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Plumbing and heating, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Railway construction, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Structural iron work (erec-ting), ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Charcoal, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chemicals, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Oils, essential, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paints and varnishes, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Powder and other explosives, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brick, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cement, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Underwear, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flour and grist mill products, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Slaughtering and meat packing, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lumber and timber products, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Printing and publishing, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Carpets and rugs, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Woolen, worsted and felt goods, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bullets, blooms and slabs, ...	5	1	3	2	1	1	1	1	1	1	1	1	1	1
Cars and car wheels, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of March, 1916—Continued.

INDUSTRIES.	CAUSE.										NATURE OF INJURY.				
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	
Castings, iron and steel, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	
Engines, stationary, ...										1	.....	.....	.....	.....	
Forgings, iron and steel, ...										1	.....	.....	.....	.....	
Hardware and specialties, ...										1	.....	.....	.....	.....	
Iron, pig, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
Machinery and parts, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Machine repair shops, ...															
Pipes and tubing, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Plates, iron and steel, ...															
Pulleys, bangers and bearings, ...															
Railroad supplies, ...															
Rods, steel in coils, ...															
Shapes, structural, ...															
Sheets, ...															
Ore, iron, ...															
Slate, roofing, ...															
Stone, ...															
Coal, anthracite, ...															
Coal, bituminous, ...															
Public service, ...															
Miscellaneous, ...															
Hotels and restaurants, ...															
Mercantile establishments, ...															
Jobbers and wholesalers, ...															
Municipalities, ...															
	21	25	71	21	3	73	.....	1	1	35	15	116	9	55	

Fatal Accidents by Cause, Nature of Injury, Social Condition, County, Etc., for Month of March, 1916—Continued.

INDUSTRIES.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		CLASS.			COUNTIES.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.	Single.	Number of dependents.	Industrial.			Mines.	Public service.
Castings, iron and steel, ...				2	4	.....	2	2	5	4	.....	.....	4
Engines, stationary, ...					1	.....	1	.....	2	1	.....	.....	1
Forgings, iron and steel, ...				1	1	.....	1	.....	.....	1	.....	.....	1
Hardware and specialties, ...					1	.....	1	.....	.....	1	.....	.....	1
Iron, pig, ...				1	6	.....	3	3	6	6	.....	.....	6
Machinery and parts, ...					2	.....	2	.....	.....	2	.....	.....	2
Machine repair shops, ...					1	.....	1	.....	.....	1	.....	.....	1
Pipes and tubing, ...					1	.....	1	.....	.....	1	.....	.....	1
Plates, iron and steel, ...					1	.....	1	.....	.....	1	.....	.....	1
Pulleys, hangers and bearings, ...				1	1	.....	1	.....	.....	1	.....	.....	1
Railroad supplies, ...					1	.....	1	.....	.....	1	.....	.....	1
Rods, steel, in coils, ...					3	.....	2	1	5	3	.....	.....	3
Shapes, structural, ...				1	3	.....	1	1	3	3	.....	.....	3
Sheets, ...					1	.....	1	.....	.....	1	.....	.....	1
Ore, iron, ...					1	.....	1	.....	.....	1	.....	.....	1
Slate, roofing, ...					1	.....	1	.....	.....	1	.....	.....	1
Stone, ...					2	.....	1	1	3	.....	.....	.....	2
Coal, anthracite, ...		2	.....	18	68	.....	39	29	86	.....	68	.....	68
Coal, bituminous, ...				8	45	.....	31	14	57	.....	45	.....	45
Public service, ...				7	48	.....	33	15	50	.....	.....	48	48
Miscellaneous, ...				4	10	.....	8	2	2	10	.....	.....	10
Hotels and restaurants, ...				1	1	.....	1	2	.....	3	.....	.....	3
Mercantile establishments, ...					3	.....	1	.....	.....	3	.....	.....	1
Jobbers and wholesalers, ...				1	1	.....	1	.....	.....	1	.....	.....	1
Municipalities, ...				1	3	.....	3	.....	.....	4	.....	.....	4
Total, ...		2	.....	54	250	1	160	91	274	86	117	48	251

Degree and Class of Accidents Reported in 1915, by Counties.

County.	DEGREE.			CLASS.			Total.
	Fatal.	Serious.	Minor.	Industrial.	Mines.	Public Service.	
Adams, ...	1	3	10	11	.....	3	14
Allegheny, ...	134	1,336	13,816	13,221	502	1,563	15,286
Armstrong, ...	11	55	353	243	179	2	424
Beaver, ...	18	146	925	1,025	1	63	1,089
Bedford, ...	3	8	34	27	5	3	45
Berks, ...	6	113	1,064	941	.....	242	1,183
Blair, ...	16	320	2,653	2,387	8	594	2,989
Bradford, ...	1	72	805	747	1	130	878
Bucks, ...	1	14	144	118	.....	41	159
Butler, ...	3	61	730	772	12	10	794
Cambria, ...	61	555	3,603	3,858	305	56	4,219
Cameron, ...	6	4	33	87	1	5	93
Carlton, ...	36	134	1,719	479	1,443	27	1,939
Centre, ...	4	5	27	15	15	6	36
Chester, ...	5	60	205	232	.....	38	270
Clarion, ...	4	9	35	32	13	3	48
Clearfield, ...	9	52	218	124	128	27	279
Clinton, ...	3	74	725	549	3	250	802
Columbia, ...	12	56	439	352	146	9	507
Crawford, ...	3	15	88	85	.....	21	106
Cumberland, .....	.....	47	374	320	.....	101	421
Dauphin, ...	13	273	1,432	1,160	19	589	1,763
Delaware, ...	7	47	316	336	.....	34	370
Elk, ...	6	67	152	162	40	23	225
Erie, ...	5	43	491	409	.....	70	479
Fayette, ...	53	325	2,119	341	2,006	95	2,502
Forest, ...	3	3	13	13	.....	1	19
Franklin, ...	2	23	186	163	.....	48	211
Fulton, .....	.....	.....	.....	.....	.....	.....	.....
Greene, ...	1	5	3	.....	.....	.....	.....
Huntingdon, ...	4	10	70	43	9	.....	9
Indiana, ...	11	43	170	83	125	31	84
Jefferson, ...	7	10	37	23	25	16	224
Juniata, .....	.....	3	42	12	.....	6	54
Lackawanna, ...	165	535	1,946	341	2,181	33	45
Lancaster, ...	3	18	159	124	.....	124	2,646
Lawrence, ...	4	75	854	752	22	56	180
Lebanon, ...	5	22	482	502	.....	159	933
Lehigh, ...	20	92	584	664	.....	7	509
Luzerne, ...	180	432	1,679	226	2,004	32	696
Lycoming, ...	1	27	218	154	1	61	2,291
McKean, ...	2	21	124	126	.....	91	246
Mercer, ...	8	114	1,145	1,154	50	21	147
Mifflin, ...	7	13	188	199	.....	63	1,267
Monroe, .....	.....	6	15	13	.....	9	203
Montgomery, ...	7	89	485	550	.....	8	21
Montour, .....	.....	1	8	6	.....	31	531
Northampton, ...	41	183	1,706	1,878	.....	3	9
Northumberland, ...	27	95	482	206	302	52	1,930
Perry, .....	.....	7	55	29	.....	96	604
Philadelphia, ...	72	674	4,584	3,693	.....	33	62
Pike, .....	.....	.....	1	1	.....	1,637	5,330
Potter, .....	.....	9	77	84	.....	.....	1
Schuylkill, ...	71	255	1,841	750	1,248	2	86
Snyder, .....	.....	1	5	5	.....	169	2,167
Somerset, ...	11	33	51	12	59	1	6
Sullivan, ...	3	6	11	15	4	24	95
Susquehanna, ...	2	6	40	28	1	1	20
Tioga, ...	4	8	31	19	20	19	48
Union, .....	.....	2	6	4	.....	4	43
Venango, ...	6	29	221	179	.....	5	7
Warren, .....	.....	12	75	77	.....	76	255
Washington, ...	45	131	572	340	390	10	87
Wayne, .....	.....	4	15	17	1	18	748
Westmoreland, ...	58	293	2,091	996	1,391	1	19
Wyoming, ...	2	.....	8	10	.....	55	2,442
York, ...	6	40	229	241	.....	.....	10
Total, ...	1,203	7,274	53,063	41,785	12,715	*7,040	61,549

*Shop accidents are classified as Industrial.

AGREEMENTS IN THE BUREAU OF WORKMEN'S COMPENSATION OF THE DEPARTMENT OF LABOR AND INDUSTRY INDICATE THAT FOR 290 FATALITIES IN INDUSTRIAL ACCIDENTS DURING THE FIRST FIVE MONTHS OF THIS YEAR A TOTAL OF \$742,962.75 WILL BE PAID DEPENDENTS.

Workmen's Compensation to be paid the dependents of 290 workers killed in industrial accidents in Pennsylvania during the first five months of 1916 aggregated \$742,962.75.

That amount, to be paid in installments to dependents, during the coming years, is for fatal cases exclusively and does not include cost of medical attendance and compensation in non-fatal cases. It is estimated that when all the compensation agreements are perfected the total amount of compensation for fatalities will approximate \$1,500,000.

The average total compensation in each of the 290 cases is \$2,560.90. That compensation benefits principally the men of modest wages is indicated by the data which show that the average weekly wage of 862 men killed was \$14.86, or a total annual pay roll of \$666,084.64.

The 862 fatalities left 547 widows, 1,109 fatherless children, 37 dependent parents and 2 dependent brothers and sisters. Three hundred and fifteen unmarried workers were killed.

More than half of the total number of workers killed were Americans. The division by nationalities is as follows: Americans, 438; Italians, 111; Polish, 92; Slavish, 65; Austrians, 61; Russians, 40; Hungarians, 19; Germans, 9; Swedes, 6; Greeks, 5; Croatians, 5; Assyrians, 4; Bulgarians, 2; French Canadians, 2; Spaniards, 1.

The majority of the fatalities occurred in mines. The division by occupations is: Miners, 375; laborers, 187; iron and steel workers, 157; railroad employes, 119; clerks, 7; firemen, 9; salesmen, 5; civil engineers, 1; policemen, 1; motormen, 1; teachers, 1; carpenters, 1.

During the first five months of this year the total number of compensable accidents reported to the Workmen's Compensation Bureau numbered 26,531. Four thousand compensation agreements have been paid in full and 13,000 compensation agreements have been approved. There have been 397 petitions filed by injured employes claiming compensation. Such cases have come before referees.

RULES ADOPTED BY THE WORKMEN'S COMPENSATION BOARD.

Proceedings Before Referees.

Whenever it comes to the notice of any referee to whom a claim petition has been assigned whether before, at or after hearing held thereon, that the State Workmen's Insurance Fund is the insurance carrier of the employer defendant, the referee shall stay all proceedings and continue any hearing set or held and shall immediately notify the State Workmen's Insurance Fund at its principal office at Harrisburg.

Upon receipt of a notification from the State Fund that the employer against whom the petition has been filed has notified the Fund of the accident, as required by Section 20 of the Act creating the State Fund, the referee shall amend the record in the case, so as to make the State Fund the defendant in the place of the employer. When the referee files his award or disallowance with the Bureau he shall notify the Bureau that he has amended the record as aforesaid, so as to enable the Bureau to amend its record accordingly.

Whenever any counsel, insurance carrier or representative of any party in interest shall have filed his or its appearance in writing the referee shall serve all notices and other papers upon him or it, and not upon the party whom he or it represents, and shall return the appearance as part of the record to the Bureau with his award or disallowance of compensation.

When a claim petition is closed by a compensation agreement executed by the parties and filed with the referee, the referee in his return to the Bureau shall state whether the agreement was executed prior to, at or after a hearing, and if a hearing was held, he shall state place and time when it was held and shall forward to the Bureau an agreement or certified copy thereof.

Appeals from Referees' Decisions.

Appeals to the Board alleging that a referee has erred in his findings of fact (Form 26) need not be verified by affidavit.

Forms for Final Receipt and for Supplemental Agreements.

Whenever the disability of an injured employe to whom compensation is payable under an agreement or award has terminated by his return to work at full wages, by death or in any other manner,

a final receipt substantially as provided in Form 51-b, signed by such employe or his personal representatives and setting forth the manner in which the disability has terminated, will be accepted, as closing the case in place of a supplemental agreement on Form 14-a.

Whenever the compensation to dependents of a deceased employe payable under any agreement or award has entirely terminated by the remarriage of the widow leaving no children or by the death of all the dependents entitled thereto, a final receipt substantially as provided in Form 51-c will be accepted in place of a supplemental agreement in Form 15-a.

Whenever the disability of an injured employe has not terminated, but has increased or diminished or where, because of the death or remarriage of a dependent, the amount of compensation payable to the remaining dependents has been altered, supplemental agreements on Forms 14-a and 15-a should be executed.

Rules for the Amendment of Pleadings.

A claim petition or answer thereto may be amended before the award of the referee and any petition to the Board, answer, appeal or other pleading to the Board may be amended before action by the Board by written agreement filed with the referee at his office, or with the Secretary of the Board at its principal office at Harrisburg, or by a petition to the Board filed with the Secretary of the Board as aforesaid.

A copy of such petition to the Board must be served by registered mail upon each adverse party or his counsel, the petition must set forth under affidavit the original pleading, the amended pleading desired, the reasons why the amendment is desired, such facts as are alleged as ground for amendment and the date of mailing the copy of the petition to each adverse party.

Any adverse party may, within five days after the copy of the petition is mailed to him, file an answer under affidavit denying any fact alleged in the petition and giving any other reason why the amendment prayed therein should not be granted.

The petition will be disposed of by the Board without argument, either written or oral, at any meeting held by it not less than seven days after the service of the petition upon the adverse parties.

Any issue of fact raised by a petition for amendment and answer thereto may be heard by the Board or referred to any referee, whose finding thereon shall be final.

REPORT OF THE STATE WORKMEN'S INSURANCE FUND FOR THE FIRST FOUR MONTHS OF 1916.

The phenomenal growth and development of the State Workmen's Insurance Fund is outlined in the accompanying report of Assistant Manager Albert L. Allen presented to the State Workmen's Insurance Board covering the first four months of 1916.

A clause in Section 26 of Act 340, P. L. 1915, creating the State Fund stipulates:

"The Commissioner of Labor and Industry shall include in his annual report a full and complete statement of the administration of the said Fund." Consequently, the attached report will be incorporated in the annual report of the Department of Labor and Industry.

TO THE STATE WORKMEN'S INSURANCE BOARD.

May 24th, 1916.

The following report of the operations of the State Workmen's Insurance Fund, for the four months January 1 to April 30, 1916, is respectfully submitted.

ALBERT L. ALLEN,
Assistant Manager.

REPORT OF ADMINISTRATION—STATE WORKMEN'S INSURANCE FUND—FOUR MONTHS ENDING APRIL 30, 1916.

The State Workmen's Insurance Fund was created by Act 340 of the body of compensation laws passed by the Legislature of 1915.

The purpose of the Fund is to serve as an insurance regulator and to furnish at cost complete protection to employers against compensation liability.

The Fund is administered by the State Workmen's Insurance Board, consisting of the State Treasurer, Commissioner of Labor and Industry and the Insurance Commissioner.

This Act of Legislature became a law by the signature of Governor Brumbaugh on June 2, 1915. Soon after, the State Workmen's Insurance Board organized and held meetings at stated intervals.

The compilation of the various forms in connection with the routine and detail of the administration of the State Fund was started by the Assistant Manager on October 1, 1915.

On December 1, the greater portion of the printed matter, office equipment and supplies, had been received and the offices in the Masonic Temple Building, Harrisburg, assumed the business activity of inaugurating the following divisions:

General Executive,
Underwriting,
Claim,
Stenographic,
Accounting and Payroll Auditing,
Filing,
Inspection.

Prior to this date, arrangements were made for circularization of all the employers of labor of Pennsylvania and others interested in the plan of compensation insurance, such as Justices of the Peace, Lawyers, etc., the purpose being to educate and inform the public of the merits of State Insurance and the general outline of the Compensation Law.

The response was most satisfactory as the offices were soon deluged with applications for policies. The approved rates were announced by the Insurance Department December 13th, and the task of issuing bills to the large number of prospective insurers was then begun. In order that all applications could be underwritten and billed before January 1, it was necessary for a large temporary force and also for overtime work each day.

What was deemed at first as physically impossible was practically accomplished and the State Fund began business on January 1 with 5,097 policy-holders, and annual advance premiums in force amounting to \$445,940.23. The actual premium income will be very much more on account of the increase by payroll audit at the end of the policy year. It is probable, under the circumstances of prosperity, that a 15 per cent. increase may be obtained.

Growth.

The influx of business has never ceased and the State Fund has written on an average of about sixty-five policies daily since the law became operative. The public is kept informed of the status of the State Fund, and it is believed that a steady growth of business will be maintained throughout the year, with the goal of one million dollars of premium income before December 31, 1916.

The volume of business already obtained is a most satisfactory showing and is larger than that obtained by all the mutual companies combined and places the State Fund among the leaders of the carriers writing compensation insurance in Pennsylvania. This record is exceptional and probably unprecedented in the history of insurance, as it is doubtful whether any insurance institution has ever made a better initiative showing.

The rapid growth of the State Fund created a demand for more room and the entire street floor of the Masonic Temple, Harrisburg, is now occupied and equipped in a manner suitable for the healthy enterprise.

Service.

By the development of the State Fund system, the machinery for proper service in claim adjusting, receiving applications and issuing policies is now operating so efficiently that the increased volume of business and incidental detail is being handled without delay.

The division for the settlement of claims has adjusted virtually every claim as soon as it was due without any controversy. Several hundred medical bills for claims of physicians for services to injured employes have been promptly paid as a part of the State Fund's effort to give efficient claim service.

The service which the State Fund gives in the settlement of claims is thorough and its aim is to give perfect satisfaction, with justice to both the employer and employe.

Branch offices, for the extension of the State Fund services to all sections of the Commonwealth, have already been established in the North American Building, Philadelphia; the Hartje Building, Pittsburgh; the Chamber of Commerce Building, Altoona; and the Union National Bank Building, Scranton. From these offices, representatives of the State Fund will give information regarding State Insurance and adjust claims coming within the jurisdiction of their districts.

Stability.

Catastrophes cannot impair the financial stability of the State Workmen's Insurance Fund. The catastrophe hazard of the State Fund has been reinsured in excess of \$50,000. That means that any

single catastrophe in which employes were killed or injured to create claims of say \$150,000 against the State Fund, every dollar in excess of \$50,000 for those claims would be paid from other sources than from the revenues of the State Workmen's Insurance Fund.

The soundness and security of the State Fund can be accepted as absolutely established. Unsuccessful insurance funds operated by one or two other States are cited as examples of failure of State Insurance, although the cases are in no sense parallel with Pennsylvania.

The West Virginia State Fund was compelled by the Legislature to charge a rate not to exceed \$1.00 per one hundred dollars of annual payroll, even for the most hazardous risks. That amount was declared inadequate and experience has proved it to be inadequate especially in a coal mining state.

The Pennsylvania State Fund is one of the most recent to be established and its creators have had the benefit of the experiences of other States. By way of contrast with the West Virginia State Fund, the New York State Fund may be cited as one which has been eminently successful and has paid dividends averaging 20 per cent.

Merit Rating Schedule.

The schedule of merit rating from the basic rates has been compiled by a committee of six representatives, including representatives of three stock companies, of two mutual companies and the State Fund. In the formulation of this merit rating schedule, the stock insurance companies occupied a controlling position but the State Fund accepted the schedule as equitable and sound.

Our inspection force, working under the schedule rating plan, which has been adopted for the Commonwealth of Pennsylvania, is in the field, visiting employers for preliminary inspections preparatory to the inspections for the official rating by the Pennsylvania Compensation Rating and Inspection Bureau.

Safety engineering service and advice will be given without cost to employers. This service will enable them to perfect their plants and improve conditions to a degree which will permit the greatest possible reduction of premium.

Credits and charges will be applied to the original compensation rates by the application of this merit rating schedule through the Pennsylvania Compensation Rating and Inspection Bureau, with which all companies writing compensation insurance will be associated.

Credits will be given for efficient safety organization and inspection and instruction service, light, sanitation and first-aid equipment.

Under this schedule, unguarded points are charged in proportion to their relative values, but no charge is made which cannot be removed by the action of the employers conforming to safety standards.

Financial Statement.

A detailed statement covering the first four months is submitted as a part of this report. The general important facts are summarized upon page 49 and do not need to be commented upon under this heading.

In the following paragraphs of this report, the work of the various divisions of the State Fund is briefly described.

Underwriting.

The underwriting force has been called upon to handle over 20,000 applications for insurance. This work has been done with a high standard of thoroughness and I believe I am safe in expressing the declaration that our work is done more accurately and equitably than that of some of the other carriers. Our men are now well trained and specialize in compensation underwriting which should give our work the greatest attainment of efficiency.

Inspection.

The staff of this division has been in the field making preliminary inspections under the schedule rating plan. By this method, we are able to extend a service welcomed by the policy-holders. Recommendations are submitted immediately after the visit of our inspector in order that the employer may improve defective and unsafe conditions before the official inspection for rating is made by the Pennsylvania Compensation Rating and Inspection Bureau.

Our efforts have met with a commendable enthusiasm from the employers and in no case have we confronted any opposition. It is very evident that the progressive employer is wide awake to the possibility of safeguarding the lives of his employees.

Inspections are made for the following purposes: To determine the proper classification of a risk and subdivision of the payroll for the information of the underwriting department; to assist the employer in fulfilling the safety standards of the Rating Bureau in order that his rate may be reduced; to instruct employers whose plants have not been inspected for schedule rating with respect to improvement that should be made to secure the lowest obtainable merit rate; to reinspect plants already inspected in order to ascertain if safety recommendations have been given proper attention.

Accounting and Pay Roll Auditing.

This division has complete records of all policies issued and monies received and disbursed. Seven different books of account are used:

Cash book for the receipts from policy-holders.

Cash book for loss payments and miscellaneous disbursements.

Premium Journal for premiums and adjustments of policy-holders' accounts.

Policy-holders' ledger, in which the charges from the premium journal are posted and the receipts from the cash book are credited.

Journal for miscellaneous closing entries.

General ledger for standard accounts and controlling items.

Experience ledger showing loss payments and the classified experience of each policy-holder.

The work of auditing payrolls will be assigned to this division at the end of the policy period when inspection of pay rolls becomes necessary.

Claim.

The problem of organizing and controlling properly the claim service of the State Fund is extremely important. If this service is not very carefully watched and checked, the cost will prove a very heavy burden, as many items may be rightfully saved by vigilant attention to details. The reputation of the State Fund depends upon prompt and satisfactory adjustments with justice to employer, employe and physician.

In the four months under review, 1,279 medical claims have been paid at an average cost of \$6.23 each. No fee schedule has been adopted by the State Fund, as it was not deemed expedient. In many cases, extraordinary conditions require individual attention, and should be adjusted upon meritorious circumstances.

The work of investigating the vast number of claims, for the purpose of facts involved, as well as obtaining the signed agreements, requires a number of specially trained men who must be able to thoroughly advise with the injured employes. A satisfied claimant and a satisfied policy-holder are our best advertisements.

We are giving service in this division which probably is not equalled by other insurance carriers, and many favorable comments to this effect have been received from policy-holders.

General.

Continual activity must be exercised in order that the State Fund may be amply able to serve in the capacity for which it was intended, as a regulator in the field of compensation insurance. No monopolistic idea is contemplated but insurance with the State Fund offers the best and most complete form of protection available.

The showing which has been made demonstrates the soundness of State Insurance when properly administered and the future will serve to further convince the insuring public.

The experience of the State Fund for the four months has been favorable, and on the basis of such an average it is safe to assume that substantial dividends can be declared at the end of the policy term.

The success of the State Fund has not been attained without a concerted effort on the part of the entire organization and an expression is not misplaced in this regard. By the same degree of loyalty and co-operation that has heretofore been shown, the continued success of the State Fund is assured.

FINANCIAL STATEMENT—STATE WORKMEN'S INSURANCE FUND—JANUARY 1, 1916-APRIL 30, 1916.

General Facts Concerning Statement for Four Months Ended April 30, 1916.

	January 1.	March 31.	April 30.
Number of policy-holders, ...	5,097	10,979	12,032
Premiums in force, ...	\$445,940.23	\$657,844.16	\$682,209.58
Number of employes covered, ...	57,438	108,818	117,138
Earned premiums for period, ...			\$199,211.38

NOTE:

Premiums in Force—The total amount of the premiums of the State Fund written for the policy period ending December 31, 1916. These amounts will be increased by pay roll adjustment at the end of the policy period.

Earned Premiums That proportion of the net premium corresponding to the portion of the policy term during which the insurance has been in force; for example, if in force three months, earned premium equals one-fourth of the advance premium in each case, etc.

Expenses for 4 months period, ...	\$37,732.20
Expense ratio to earned premium, ...	18.9%
Losses and loss reserve, ...	\$116,535.32
Loss ratio to earned premium, ...	58.5%
Surplus to policy-holders, ...	\$69,844.89

Surplus to Policy-holders—Balance of premium receipts above payments and reserves, available for dividends.

Investments, ...	\$337,773.00
Number of accidents reported, ...	2,174
Number of death cases reported, ...	37

Assets and Liabilities, April 30, 1916.

ASSETS.

Investments, ...	\$337,773 00
Cash on deposit, ...	132,923 29
Deferred premiums, ...	186,256 06
Interest due and accrued, ...	5,143 30
	\$662,095 65

LIABILITIES.

Reserve for losses, ...	\$99,292 00
Reserve for unearned, ...	482,998 20
Reserve for catastrophe,, ...	9,960 56
	\$592,250 76
Total Reserves, ...	69,844 89
Surplus to Policy-holders, ...	
	\$662,095 65

NOTE:

Deferred premiums—The additional premiums due from policy-holders on account of monthly, quarterly and semi-annual adjustments.

Reserve for losses—The estimated amount required to carry on outstanding claims to maturity.

Reserve for unearned premiums—That proportion of the premiums corresponding to the portion of the policy term during which the insurance has still to run.

Reserve for catastrophe—The amount of deductions from earned premiums on the 5 per cent. basis as required by Section 9 of the Act.

Income and Disbursements, Four Months Ended April 30, 1916.

INCOME.

Premiums, ...	\$682,209 58
Interest on investments, ...	1,500 00
Interest due and accrued on investments, ...	3,678 71
Interest due on deposits, ...	1,464 59
	\$688,852 88
Total, ...	

DISBURSEMENTS.

LOSSES PAID:

Temporary Total, ...	\$7,499 66	
Disbursement, ...	190 99	
Death—dependency, ...	512 93	
Death, no dependency, ...	1,070 90	
Medical, ...	7,968 84	
Total Losses Paid, ...		\$17,243 32
Return premiums, ...		784 38
Re-insurance, ...		5,000 00
Interest paid on bonds acquired, ...		3,729 53

RESERVES:

For losses, ...	\$99,292 00	
For unearned premiums, ...	482,998 20	
For catastrophe, ...	9,960 56	
Surplus to policy-holders, ...		\$592,250 76
		69,844 89
Total, ...		\$688,852 88

Analysis Loss Reserve and Payments by Classes, April 30, 1916.

Code.	Kind of Benefit.	Reserves.	Payments.	Total.
1	Medical, ...	\$8,745 61	\$7,968 84	\$16,714 45
2a	Temporary total, ...	14,258 84	7,499 66	21,758 50
b	Permanent total (O. T. D.), ...			
c	Dismemberment, ...	6,022 17	190 99	6,213 16
3a	Temporary partial, ...			
b	Permanent partial, ...			
c	Dismemberment, ...			
4a	Funeral expenses, ...	2,882 00	1,070 90	3,952 90
b	Death dependency, ...	67,383 56	512 93	67,896 49
		\$99,292 18	\$17,243 32	\$116,535 50

Premiums written, ...	\$682,209.58
Unearned premiums, ...	\$482,998.20
Earned premiums, ...	\$199,211.38
Loss ratio to earned premiums, ...	58.5%

Analysis of Expenses, Four Months Ending April 30, 1916.

Salaries, ...	\$27,514 62
Rent, ...	1,038 33
Furniture and fixtures, ...	2,966 62
Office supplies, ...	540 29
Postage, ...	3,100 00
Stationery and printing, ...	625 29
Traveling expenses, ...	877 71
Telegraph, telephone and express, ...	120 15
Miscellaneous, ...	949 19
Total, ...	\$37,732 20

Investments.

Description.	Par Value.	Cost.	Date Due.	Interest.
Borough Sugar Notch, Pa. School District, ...	\$500 00	\$535 33	5/1/28	5 %
" " " " " " " " " " " "	2,000 00	2,181 46	5/1/33	5 %
" " " " " " " " " " " "	2,000 00	2,188 52	5/1/34	5 %
" " " " " " " " " " " "	2,000 00	2,195 30	5/1/35	5 %
" " " " " " " " " " " "	2,000 00	2,201 78	5/1/36	5 %
Borough Lehighton, Pa., School District, ...	28,000 00	29,898 40	6/1/45	4½%
Borough Dorranceton, Pa., improvement and paving,	6,500 00	7,062 57	6/1/34	5 %
" " " " " " " " " " " "	4,500 00	4,993 78	6/1/35	5 %
City of Altoona, refund bonds, ...	50,000 00	50,000 00	7/1/36	4 %
Borough of Columbia, Pa., ...	30,000 00	30,000 00	1/1/46	4 %
County of Allegheny, Rd. series, ...	1,000 00	997 50	2/1/37	4 %
" " " " " " " " " " " "	25,000 00	24,937 50	4/1/37	4 %
Borough Sharpsburg, Pa., School District, ...	3,000 00	2,977 50	11/1/23	4 %
" " " " " " " " " " " "	3,000 00	2,977 50	11/1/24	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/25	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/26	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/27	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/28	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/29	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/30	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/31	4 %
" " " " " " " " " " " "	5,000 00	4,962 50	11/1/32	4 %
Borough Washington, Pa., street improvement,...	25,000 00	24,968 75	10/1/31	4 %
" " " " " " " " " " " "	25,000 00	24,968 75	10/1/32	4 %
Borough Butler, Pa., ...	13,000 00	12,727 00	8/1/20	3½%
" " " " " " " " " " " "	19,000 00	18,001 36	8/1/29	3½%
POTTER TITLE & TRUST CO.				
First lien guaranteed mortgages on properties situate Pittsburgh and vicinity, ...	54,350 00	54,350 00	Varies.	5½%
	\$335,850 00	\$337,773 00		

MOTION PICTURES FOR SAFETY MAKE IMPRESSION.

As has been mentioned in previous numbers of the Bulletin, the Department has been giving motion picture exhibitions on safety in various communities. During the early part of the year an exhibition was given in Bloomsburg under the auspices of the Business Men's Association and one afternoon the various public school children were invited to attend the lecture and see the pictures. At the conclusion of the exhibition, prizes were offered for essays from the Grammar School children on what they saw and learned from the motion pictures. A large number of essays were submitted and the three following were judged to be the prize winning ones. They clearly demonstrate the value there is in teaching children safety.

How Did the Safety First Exhibition Benefit Bloomsburg?

James H. Sterner, B Grammar.

Through the Business Men's Association the people of Bloomsburg and vicinity had the pleasure of seeing the Safety First pictures shown at the Normal Auditorium, March 23rd and 24th, 1916. These pictures are being sent through the State by the Department of Labor and Industry to assist in diminishing the numerous accidents.

The factories of Bloomsburg should learn to keep the floors of their buildings clean and to store boxes and excelsior in a fireproof room. Smoking should not be allowed in buildings.

Preparations should be made for fighting fires. If automatic sprinklers are installed and a fire starts at any time the sprinklers will put it out. Chemical cans and fire hose are two good fire extinguishers.

Every building should have fire escapes. Storing goods and boxes in front of exits often causes a loss of life. All public buildings should have fire drills. All seats should be stationary so that they cannot be moved and block the aisles.

The boys and girls of Bloomsburg should learn not to play or skate in the street because of passing vehicles.

Everybody should look before crossing a street. It is best to cross a street at a corner and not in the middle of a block.

When driving a vehicle of any kind the driver should watch out at street corners and not drive past standing trolley cars.

All railroad companies should replace wooden cars with steel ones.

All dangerous parts of machinery should have covering to prevent injury to the workmen.

Nails should be thrown where they cannot injure anyone. If a splinter or a nail causes injury it should be immediately treated by a doctor so that blood poisoning cannot start.

We thank the Department of Labor and Industry for sending the pictures and the Business Men's Association for securing them.

The Benefits of Safety First.

Catherine Cunningham, A Grammar.

On March 23rd and 24th, 1916, pictures were shown in the State Normal School auditorium on "Safety First."

These pictures were obtained from the Department of Labor and Industry. They were brought here through the efforts of the Business Men's Association of Bloomsburg and Mr. R. D. Young.

They were shown to the people of the community, the State Normal School and the Public Schools. In the pictures we saw how people are killed when fire exits are locked or blocked up by boxes and a fire occurs and the mill hands cannot get out; how children and grown-up people are killed or made cripples by going in front of street cars, trains, automobiles, and wagons. Sometimes men do not abide by the State laws not to smoke in public works nor to throw a burning match among the rubbish which may cause a large fire.

The lessons taught in the "Safety First" pictures were: Not to have fire exits locked or blocked, not to have any doors in a factory open inward but outward, not to run in front of street cars, automobiles, trains or wagons. If a live wire is down in the street the electric company should be notified, and people should always abide by the laws of the land with regard to smoking.

The pictures were free to all and we are very thankful to the Business Men's Association and Mr. R. D. Young for using their influence to get the pictures here, and we hope that all who saw them will adopt as their motto "Safety First."

Safety First.

Christine Holmes, C Grammar.

The Safety First pictures were shown March 23rd and 24th in the Bloomsburg State Normal Auditorium. They were secured by the Business Men's Association. Mr. Robert Young was the man who got the pictures from the Department of Industry and Labor.

They were shown to everybody who had a ticket and tickets were given to all who wanted to see the pictures. It was very kind to have the school children of Bloomsburg to come and see them.

The pictures were very true and exciting.

They consisted of accidents and wrecks which were caused by people's carelessness.

One showed a man who was told not to smoke around the building. He disobeyed and threw his lighted match carelessly aside. The building caught fire and much property was lost.

Another picture showed children playing ball in the middle of the street and the ball rolled across the trolley track. When one boy went for the ball he was struck by an automobile and was injured for life. Another picture showed how some found a broken electric wire and reported it, and that prevented an accident. Another picture showed how a thoughtless boy left his little sister standing on a trolley track while he went off to play. The little girl was run over and killed. Other pictures showed how locked doors and blocked passages caused great loss in time of fire. A lesson was shown in one of the pictures how to take care of a wound and in that way prevent blood poisoning. A great many pictures were shown how to prevent accidents by covering the most dangerous parts of the machinery. Just this last week a bad accident was caused by a little girl of our town of Bloomsburg who took hold of a live wire and had her hand badly burned. These lessons show that we should be careful and thoughtful and always remember Safety First.

Associations or individuals desiring to have these pictures shown in their communities should address the Department of Labor and Industry, Harrisburg.



SAFETY STANDARDS

OF THE

INDUSTRIAL BOARD



PENNSYLVANIA DEPARTMENT OF
LABOR AND INDUSTRY

BOILERS—Part II

ADMINISTRATION

OPERATIVE ON AND AFTER JULY 1, 1916

INDUSTRIAL BOARD.
DEPARTMENT OF LABOR AND INDUSTRY.
STATE OF PENNSYLVANIA.

JOHN PRICE JACKSON, Chairman,
Harrisburg.

OTTO T. MALLERY,
Philadelphia.

WILLIAM YOUNG,
Philadelphia.

COL. JOHN P. WOOD,
Philadelphia.

MRS. SAMUEL SEMPLE,
Titusville

WILLIAM LAUDER, Secretary.
Harrisburg.

RULES AND REGULATION FOR THE
ADMINISTRATION OF THE
BOILER CODE.

PETITIONS.

The following safety standards have been adopted by the Industrial Board, subject to the provisions of the Law (Act 267, section 15, P. L. 1913) which provides that persons affected may petition the Board for changes in the regulations. Upon the receipt of such petition, it will be reviewed by the Board and if considered necessary a public hearing will be called in regard thereto.

PENALTIES.

Every person or persons who violates any of the provisions of Act 267 of June 2, 1913, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officer or agents of the Department of Labor and Industry in the performance of his duties in accordance with the said rules and regulations, shall be deemed guilty of a misdemeanor and shall upon conviction thereof, be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding one month, or both, at the discretion of the court.

RULES AND REGULATIONS
FOR THE
ADMINISTRATION
OF THE
BOILER CODE

Commission for Inspectors.

Section 1. No person shall be authorized to act for the Commonwealth, as a Boiler Inspector, unless he has passed an examination, described in Section 4, and unless he holds a commission from the Department of Labor and Industry.

Section 2. (a) A commission shall be revoked by the Commissioner of the Department of Labor and Industry for incompetence or untrustworthiness, for wilful falsification of any matter or statement contained in his application, or in a report of any inspection, or for other sufficient reasons.

(b) A person whose commission is revoked may appeal from such revocation to the Industrial Board, which shall immediately consider the appeal and either set aside or affirm the revocation, and its decision shall be final.

(c) The person whose commission has been revoked shall be entitled to be present in person and by counsel at the hearing of the appeal. If a certificate or commission is lost or destroyed a new certificate or commission shall be issued in its place without another examination.

Time for Holding Examinations.

Section 3. The Department of Labor and Industry shall hold regular examinations for Boiler Inspectors at Harrisburg, or elsewhere, four times each year, namely, first Wednesday in February, May, August and November. Special examinations may be held when necessary.

Applications for Examinations.

Section 4. (a) Application for examination as an inspector of steam boilers shall be in writing, upon a blank to be furnished by the Division of Boiler Inspection, Department of Labor and In-

dustry, stating the school education of the applicant, a list of his employers, his period of employment and the position held with each. He shall also submit a letter from one or more of his previous employers certifying to his character and experience.

(b) Applications shall be rejected which contain any wilful falsification or untruthful statements. Such applicant, if the Department of Labor and Industry deems his history and experience sufficient, shall be given an examination dealing with the construction, installation, operation, maintenance and repair of steam boilers and their appurtenances, and the applicant shall be accepted or rejected on the merits of his application and examination. After the expiration of ninety days a rejected applicant may be accorded another examination.

Section 5. Upon favorable report from the examining committee to the Commissioner of the Department of Labor and Industry, he shall immediately issue to the successful applicant a commission and working card.

Exemptions.

Section 6. All steam boilers and their appurtenances (except boilers of railroad locomotives subject to inspection under federal laws, boilers of automobiles, boilers of steam fire engines brought into the Commonwealth for temporary use in times of emergency for the purpose of checking conflagration and boilers carrying pressures of less than fifteen pounds per square inch), which are equipped with safety devices approved by the Industrial Board, and boilers under the jurisdiction of the United States, shall be thoroughly inspected annually, internally and externally, and under operating conditions, and shall not be operated at pressure in excess of the safe working pressure stated in the certificate of inspection hereafter mentioned. And shall be equipped with appliances to insure safety of operation prescribed by the Industrial Board.

Inspection.

Section 7. (a) The inspection of boilers and their appurtenances shall be made by the inspectors mentioned herein under the supervision of the Department of Labor and Industry, and it shall be the duty of the said department to enforce the rules of the Industrial Board.

(b) If an inspector finds the boiler is not in safe working condition or is not provided with the fittings necessary for safe operation, or if the fittings are improperly arranged, he shall immediately notify the owner or user or person in charge of the boiler and shall

report the same to his employer and send a copy of his report to the Bureau of Inspection of the Department of Labor and Industry, and shall withhold such certificates until the boiler and its fittings are put in condition to insure safety of operation. The owner or user shall not operate or permit it to be operated until such certificate has been granted or restored.

(c) It shall be the duty of the inspector when making inspections under operating conditions, to observe the pressure of steam carried, the general condition of each boiler, to ascertain if the safety valve and the appliances for indicating the pressure of steam and level of water in the boiler are in proper working order.

(d) No person shall remove or tamper with any safety appliances prescribed by the Board, and no person shall in any manner load the safety valve to a greater pressure than that allowed by the certificate of inspection. If in the judgment of the inspector it is advisable to apply a hydrostatic pressure test to the boiler, the owner or user shall prepare the boiler for such test, as directed by the inspector.

(e) The owner or user of any steam boiler herein required to be inspected shall immediately notify the Division of Inspection of the Department of Labor and Industry in case a defect affecting the safety of the boiler is discovered.

(e) The owner or user of any steam boiler herein required to be inspected shall immediately notify the Division of Inspection of the Department of Labor and Industry in case a defect affecting the safety of the boiler is discovered.

Inspectors.

Section 8. Inspectors of existing boilers after July 1, 1916, shall be required to file with the Division of Boiler Inspection, Department of Labor and Industry, a duplicate of the data report filed with the company employing them. If in the judgment of the inspector the condition of the boiler requires that the certificate be withheld or withdrawn, a repair report or inspection report shall be filed with the Department of Labor and Industry showing that the boiler has been put in safe working condition, before the certificate will be issued or restored.

Removal of Boilers.

Section 9. The owner or user who moves any stationary boiler herein required to be inspected, shall report to the Division of Inspection of the Department of Labor and Industry the new location of said boiler and the boiler shall pass inspection before it is again operated.

Section 13. Each boiler shall be stamped by the builder, with a serial number and with the name of the builder, either in full or abbreviated, and the stamp adopted by each boiler manufacturer shall be registered with the Department of Labor and Industry. The height of letters and figures used in stamping shall be not less than one-quarter ($\frac{1}{4}$) inch.

Materials contracted for before July 1, 1916, and at that time considered standard, shall not be rejected.

Section 14. A data report on forms to be furnished by the Department of Labor and Industry, shall be forwarded by the builder to the Chief Inspector of such Department for each boiler stamped Penna. Std. before the boiler is shipped from the shop.

Marking of "Unsafe Boilers."

Section 15. All boilers having been inspected and declared unsafe by an approved Boiler Inspector, shall be designated by "XX" with an arrow head on each side as shown by the following facsimile



which will designate an unsafe boiler. No person except an approved inspector shall deface or remove such number.



MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



A BULLETIN OF INFORMATION FOR THE PUBLIC

AUGUST, 1916

HARRISBURG, PA.:
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1916

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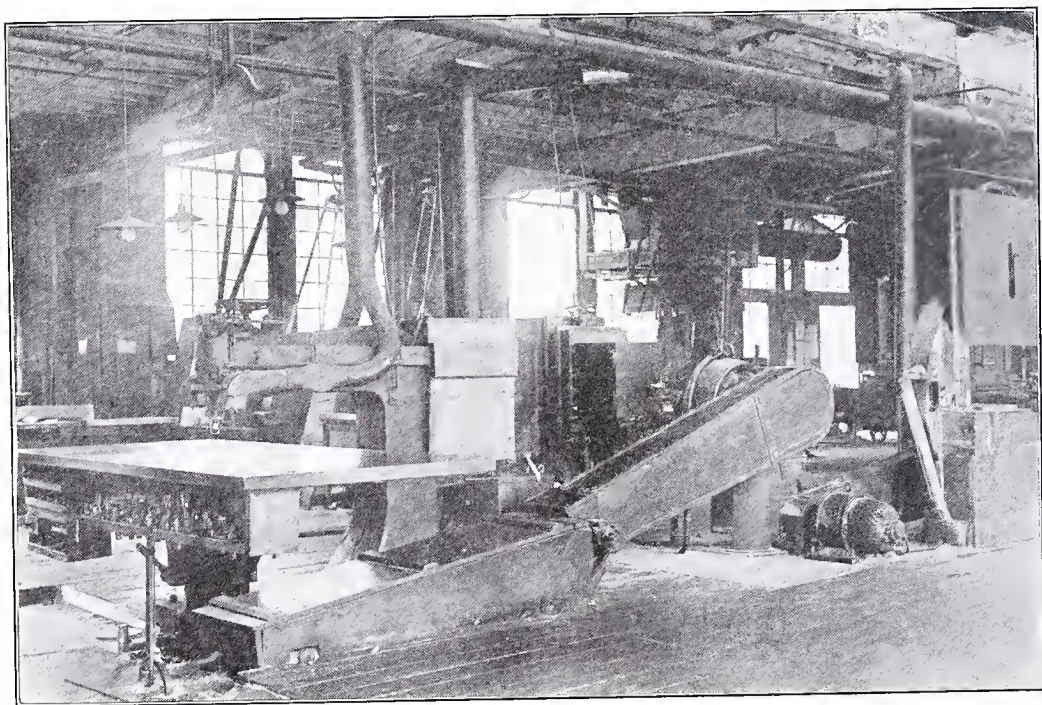
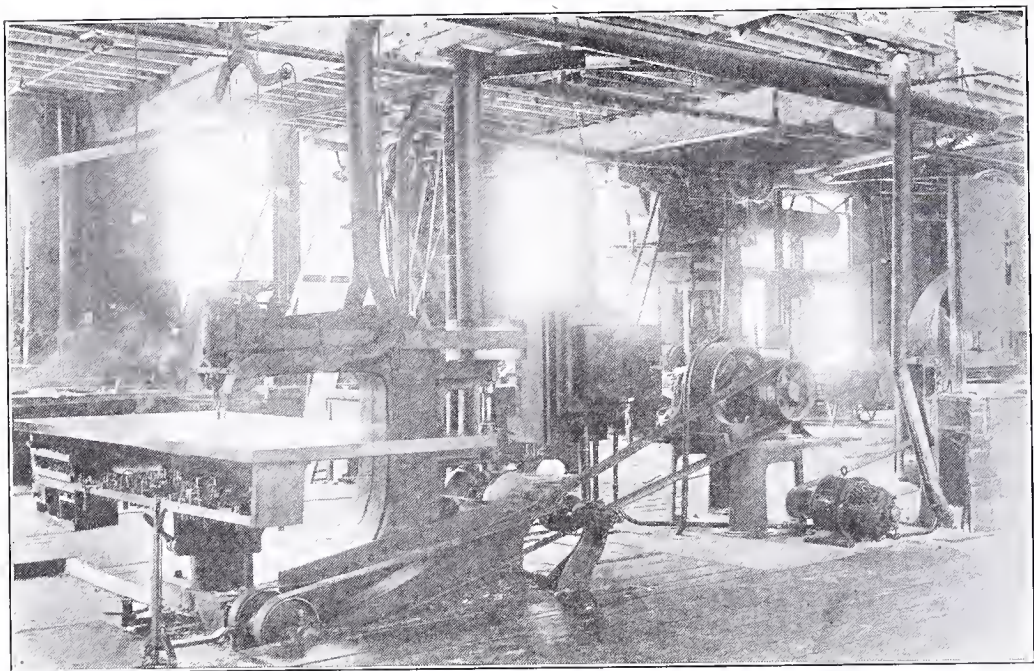
BUREAU OF WORKMEN'S COMPENSATION

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John A. Scott, Indiana.
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Secretary, Lee Solomon.

Attorney General, Francis Shunk Brown, Counsel
ex officio.
Counsel, Francis H. Bohlen, Philadelphia.
Associate Counsel, H. C. Hubler, Scranton.
Associate Counsel, Charles H. Young, Pittsburgh.





How belts and exposed mechanism of a shaper, at the plant of the Lorain Steel Company, Johnstown, Pa., were completely guarded to prevent accidents, is shown in the above photographs. Dangers obvious in the upper picture were eliminated by the box guards.

FIVE MONTHS' EXPERIENCE UNDER WORKMEN'S COMPENSATION.*

Not only in the United States but throughout the whole civilized world there has been for many years a growing conviction that a legal system by which sufferers from industrial accidents were required to obtain relief by action at law, requiring proof that their employers were at fault, however ideal in theory, had failed to accomplish satisfactory results. I do not propose to review the causes which led to this conviction. The fact that some system of compensation is now in force in, practically, every European country and in over thirty states of the Union, including all but a very few of those of great commercial and industrial importance, is sufficient proof that it is real and abiding. The Workmen's Compensation Act was enacted in response to this conviction.

The four principal defects which are alleged to exist in the old system were:—

1. That the three defenses of fellow service, voluntary assumption of risk and contributory negligence, available to employers in actions at law, were thought to press with undue severity upon workmen.
2. That damages were covered in only a very small percentage of cases when by an industrial accident a workman was killed or so injured as to materially diminish his earning power so that the greater part of the economic distress, caused by such accidents went unrelieved, and was taken care of by charity.
3. That the delays inseparable from the litigation necessary for the judicial determination of the existence of negligence not only withheld relief from the victims of industrial accidents, (even where relief was obtained) during the period when it was most needed but also gave to unscrupulous employers and their insurers power to obtain unfair compromises and settlements from claimants who could not afford to wait upon the slow course of litigation.
4. That the expenses of litigation absorbed so large a part of the amount which the employer paid out that on the average less than 35% of it reached those who suffered from the industrial accident.

*Address by Professor Francis H. Bohlen, Counsel Workmen's Compensation Board, before the Bar Association, Bedford Springs, Pennsylvania, June 27.

The purpose of the Workmen's Compensation Act and those other acts, which were passed at the same time, and with it form the Compensation System of this State, was to meet those objections,—to cure these defects and to secure a certain and definite, though moderate, compensation to every victim of an industrial accident within the State; to bring this compensation to the persons entitled to it with the least possible delay and at the least possible cost to them.

How far has the first five months' operation of the Act shown that it has succeeded in accomplishing these results? On the whole it may be safely said it has already proved more successful than those, who understood the difficulties of inaugurating so elaborate a system, dared to hope. There is every indication that the future will show a constantly increasing approach to perfect success. It would be idle to assert that there have been no mistakes or that every employer, or employe within the State knows his liability and rights under the Act and is conscientiously endeavoring to do his full duty under it, but there is a constantly increasing knowledge of the Act, largely due to the campaign of publicity carried on by the Workmen's Compensation Board and the Workmen's Compensation Bureau, and a constantly increasing observance of its provisions as employer and employe come to understand them better, and the Board is gaining invaluable knowledge of the problems, peculiar to our State which will enable it to constantly increase the efficiency of its administration.

The Act, itself, covers every form and sort of employment, except casual employes and out-workers. A supplemental Act, however, provided that nothing in the principal Act shall apply to or in any way affect any person who, at the time of the injury, is engaged in domestic service or agriculture. In this way two large classes of labor have been withdrawn from the operation and benefits of the Act. I shall not attempt to discuss what is agriculture. This is a matter which must be left to the future course of litigation to determine. I may, however, point out that this supplemental Act does not relieve householders or farmers as such. It relieves them of liability only to those of their employes who, at the time of their injury, are engaged in domestic service or agriculture. It seems to me, at least, quite clear that the farmer who was having a farm house built on his farm, under his own direction by carpenters, masons, etc., would be as fully liable as any other person who engaged in a similar operation.

Apart from these four classes, every employer of labor is liable under the Act for any injury received by an employe without respect to his negligence or the negligence of the employe sustaining

the injury so long as that injury is received while in the course of the injured man's employment, unless either he or the employe in question has rejected the compensation features of the Act contained in Article III by giving the notice provided in Section 302,—and filing proof of the service thereof to the Bureau at Harrisburg in the manner prescribed in that Section. It is immaterial that the employer is free from all fault and that he could not have prevented the accident by any precaution, which even the most careful employer would imagine to be necessary; nor is it material that the injured man has been, himself, at fault or even that he was guilty of serious and willful misconduct. It is only where the injury is intentionally selfinflicted or where it is due to the direct act of a third party against the employe, for reasons personal to himself and not connected with the employment, that compensation is denied. The three common law defenses are completely eliminated. The employer is as fully answerable for an accident caused by the negligence and misconduct of a fellow workman as for one due to his own personal fault, and compensation is payable for an injury even though it results from a wellknown trade risk or is due to a machine which is defective to the employe's knowledge.

While the Act is elective, the number of employers who have rejected the Act is, practically, negligible. There are only 400 employers on record in the Bureau at Harrisburg as having served notices of rejection upon their employes, and these are employers who employ only a small number of men, and whose business is such as to involve little risk of injury upon their own premises. And employes have served upon their employers notices of rejection only in a few isolated cases in which to secure a more perfect rejection of the Act, the employer and his employes have exchanged rejections. It, therefore, appears that only a very few employers have preferred to take their chance of liability at common law as enlarged by Article II and that, practically, no employes have notified employers, willing to pay compensation, that they will refuse to receive it and will insist upon their rights at common law.

Theoretically, in practically every case where an employe receives an injury in the course of his employment which incapacitates him for more than fourteen days, or which results in his death, compensation is payable to him or his dependents. The Act, if perfectly administered and obeyed, does, therefore, meet the first objection and does secure compensation in, practically, every case of industrial accident properly so called. However, theory is one thing and practice is another. How far has practice conformed to theory, and has compensation been paid in every case where it is due? I know that statistics are dull things. I must, however, ask

you to bear with me while I give an analysis of the reports furnished to me by the Bureau of Statistics of the Department of Labor and Industry showing the number of accidents which have occurred within the State up to June first, and the number of cases in which compensation has been paid in strict accordance with the requirements of the Act. There were 102,191 accidents reported: of these 950 were fatal; 101,241 non-fatal. The report in all the fatal cases shows on its face that the death was compensable, while in 26 081 non-fatal cases, the accident caused disability of sufficient duration to entitle the sufferer to compensation.

Up to June 1st there had been filed with the Bureau 13,000 agreements executed by the employers and the employes and approved by the Board as conforming to the provisions of the Act. Of these 290 were in fatal cases. It would, therefore, appear that no compensation had been paid or agreed upon in at least 50% of the cases in which the accident report indicated that it was due. But before we can accept this as representing the true state of affairs, it is necessary to consider certain factors which have developed in practice. In the first place my experience has convinced me that the accident reports, made as they are immediately after the accident, do in many cases exaggerate the injury, so that it often happens that an accident which is reported as likely to result in prolonged disability turns out to be one where the workman regains his full earning power well within the two weeks' waiting period. They also state the cause of the accident very briefly and often without any extended or careful investigation. The very brevity with which the cause of the accident is stated gives the impression that it was received under circumstances which would entitle the victim to compensation, while subsequent and fuller investigation often shows for any of several reasons the accident is one which does not come within the terms of the Act. I, myself, know of many fatal cases, all of which appear from the accident reports to be compensable, where the accident occurred outside of the employment, or the death was found to be due to purely natural causes. It may be safely stated that in a proportionate number (how large it will take years of experience to accurately determine) of both fatal and non-fatal cases, appearing on the back of the accident reports to be compensable, there is no compensation payable under the Act.

Then again, as is natural in any new system, there is a tendency on the part of many employers to ignore the technical requirements of the Act. They feel so long as they are giving to their injured employes substantially the benefits which the Act contemplates, there is no need to go to the trouble of executing agreements and

filing them with the Compensation Board for its approval. I recently discovered quite casually that one of the largest employers of labor in the eastern part of the State had not, up to the last month, executed or filed a single agreement, though so far as I know, it had in every case paid to its employes what the law required. It is impossible without sending a horde of inspectors throughout all the industrial plants of the State to determine the exact extent of this practice, but it is fair to assume that if it prevails, as I know it has prevailed in large establishments, which have made a careful study of the Act and its requirements, it prevails to a far greater extent among the smaller employers who have given no particular attention to it.

In addition, there are a very large number of employes, particularly foreigners, who appear to have an inherent and extreme reluctance to signing any papers and whom, therefore, employers or insurance companies are unable to induce to sign the compensation agreements. This factor again is one, the effect of which has made it difficult if not impossible to accurately ascertain, but I feel convinced that it accounts for a considerable percentage of these cases.

There are also a large number of accidents reported as occurring in the course of interstate operation of interstate carriers, and until the United States Supreme Court disposes of the appeals now pending before it, from the highest Courts of New York, New Jersey and Illinois, it is impossible to tell whether a State Act, like that of Pennsylvania, has any application to such interstate accidents. Only a very few of the railroads of this State are settling their interstate accidents in accordance with the provisions of the Pennsylvania Act, and the Board has felt, until the Supreme Court of the United States has determined that the State Compensation Act does apply to interstate commerce, it should not insist that settlements be made in accordance with the Pennsylvania Act; nor has it advised workmen, injured in such accidents, and the dependents of those killed therein, to bring claim petitions.

There is a further factor which has led to delay in a considerable number of cases. Many of the principal mining operators, particularly in the western part of the State, have seriously questioned the rules which the Board has promulgated for the computation of wages. Whether they are right or wrong will be determined in the near future. A case presenting this question is now in the course of litigation and will, undoubtedly, be presented in the near future to the Appellate Courts of the State for final determination, but the fact of this difference of opinion has been to delay agreements or to cause such agreements to be made in which the wages are com-

puted. But the fact has been that these companies have either refused to make agreements at all or have made agreements in which the wages are computed in a manner different from that sanctioned by the Board, so that they have been returned without the Board's approval.

Last of all it must be remembered that the Act has only been in effect for five months. It deals with the relations of a large number of employers and an immense body of employes. It applies not only to the industrial plants but to every one who employs another to render services other than domestic and agricultural. The Board has done all in its power to bring to the attention of every employer all the exact requirements of the Act yet there must be, undoubtedly, within the State a very large number of employers, who are completely ignorant of their duties under the Act and a still larger number of employes who have no idea of the rights which it confers upon them. Until the Act has been in operation for a considerable time and the knowledge of its provisions gradually filters into the minds of the employers and employes of the State, we must expect that there will be many cases in which the compensation provided is not paid. I can, however, say that the Board has given serious thought to this problem and that in the near future a determined effort will be made to see to it that every employe whose injury appears to be compensable is, at least, apprised of his right to compensation and informed as to the steps necessary to obtain it.

In order to determine to what extent compensation has not been paid though due under the terms of the Act, it is necessary to take into account all of those classes of cases, where, on the face of the accident report, the injury appears to be compensable under the Pennsylvania Act or there is a known reason for the delay in settlement. I regret that I cannot give more accurate statistics as to the number of these cases. To obtain these statistics would require an investigation for which the Compensation Bureau is not, at present, equipped but I may say that I believe them to be of very considerable number and that taking them into account we may feel satisfied with the result of the first five months' operation of the Act.

The statistics which we have in fatal cases are more easily handled. Although at first glance the result appears to be far less satisfactory than that obtained in non-fatal cases, yet there are several factors which operate to make the actual result far more satisfactory than appears to the casual observer. In 276 out of the 950 fatal cases the victim left no dependents. The only amount which the employer was bound to pay was the \$100 provided for the

expenses of the last sickness and burial. This amount, under the Act, is payable to the personal representative of the deceased. While there are a certain number of agreements filed in such cases, in many of them the employer pays to the undertaker direct without the formality of an agreement. In others, where an employer has been unwilling to make such payments until an administrator is appointed, delay is natural, arising from the reluctance of either party to bear the expense of taking out letters of administration. In the many cases where the dependents are non-resident aliens, there is an inevitable delay in obtaining the official proofs of marriage, and the birth and age of children.

Then, too, there is in addition a further factor which is, in my opinion, most unfortunate. There is a tendency on the part of the legal advisors of some dependents to urge them to refuse compensation provided in the Act and to bring an action at law to recover damages under the Act of 1855. In my opinion such advice is extremely unwise. I do not believe that the dependents of an employe who has accepted the compensation provisions of the Act have any right of action at common law. Section 303 of the Act, as I read it, is an effectual bar to the successful prosecution of such an action and while the Supreme Court of Massachusetts has held that the parent of a deceased minor child has an action at law to recover damages for his death, the Court was careful to state that it reached this conclusion because the Massachusetts Act contained no provision effectual to operate as a surrender or bar to the effectual bringing of such an action, and to point out that the parent's right of action could, constitutionally, be barred by an appropriate provision. Apart from this, however, such advice seems to me to lose sight of the best interests of the dependents. While the amount of compensation recoverable is fixed and moderate, it is certain and comes speedily to the dependents and it comes to them without serious diminution for legal expenses, the Board having so far approved no fee in a case where a compensation agreement has been executed of more than three per cent.; therefore, even if there were a right of action at common law, which I sincerely believe does not exist, in the end, the dependents after years of litigation, would receive less actual cash than he would receive under an immediate settlement in accordance with the terms of the Compensation Act.

Besides all of this the reluctance of claimants, particularly foreigners, to sign papers is most marked in cases of death,—and, furthermore, the dispute as to the rules for computing wages has had a very serious effect as many of the fatal cases have occurred in the mines of those operators who are questioning the rules promulgated by the Board for the computation of wages, and a large

number of deaths have occurred in interstate activities. Even allowing for all of these factors, there is no doubt that the settlements in death cases have not been made as promptly as in less serious cases, but on the whole, in view of the very serious question of the liability in such cases, the showing is by no means bad, and many employers and insurance companies have made their settlements with the most commendable promptness. I will give one instance: a disaster occurred in a mine operated by a company which had insured in the State Workmen's Insurance Fund. Eight men were killed, of whom seven left dependent families. So speedy was the adjustment that compensation agreements were executed and the widows received the first instalment of compensation upon the first payday on which their deceased husbands would have received their pay had they lived. And this, I understand from the Manager of the State Workmen's Insurance Fund, is not exceptional. Other companies and employers have as good a record. I cite this merely because of my personal knowledge of it.

Turning now to the second objection raised against the old system: it is pertinent to inquire whether settlements are made speedily and cheaply. One thing seems to me quite clear. The Act has fully realized the fondest hopes of its advocates in eliminating litigation. As against the 13,000 compensation agreements entered into, up to June 1st there have been only a little more than 424 claim petitions filed. Many of these are cases where the employer is an interstate carrier, and the accident is sustained by the employe while in the course of his interstate operations. In most of them the Referees have awarded compensation and an appeal has been taken to the Board. The Board is holding all these appeals until the Supreme Court of the United States has spoken, and there is every reason to believe that if the United States Supreme Court holds that the Pennsylvania Act applies to interstate operations of interstate carriers every one of these cases will be settled, as well as all the many cases in which interstate accidents have been reported and no claim petition has been filed or no compensation agreement executed. Of the 424 claim petitions, 142 have been settled without an award; eight have been withdrawn; eighty-one have been recently filed and are still pending and compensation has been awarded or disallowed in 191. In this connection I wish to bear witness to the efficient work which the Referees have done in bringing the contending parties to a settlement. In many cases claim petitions are brought simply because the one or the other party is ignorant of his plain rights or duties under the Act.

I will not weary you with elaborate statistics showing the length of time which elapses between the accident and its settlement by an agreement voluntarily entered into or an award or other action by a Referee. I may say, however, that compensation agreements, so far as can be learned, are properly executed within the first five weeks after the accident or three weeks after such agreements can be legally executed.

The fairest test of the speed and efficiency with which the Referees have decided disputed cases is the average time elapsing between the date when the claim petition is assigned to them and the filing of their decision with the Bureau. Taking only the experience of the two Philadelphia Referees I find that in 52 decisions filed by them, the average has been a trifle over 23 days, while in the 62 cases, in which their advice has led to the execution of agreements after the filing of a claim petition, these agreements have been executed within 11 days after the case has been sent to the Referee.

While many of the attacks constantly made, particularly by social workers, against the enforcement of compensation liability by actions in the common law Courts are, in my opinion, exaggerated and often captious, yet these results, I think, show that the system under which the Pennsylvania Compensation Act is administered does secure a more expeditious decision than could be obtained by an action brought in the existing Courts of this Commonwealth, especially where the compensation claimed is small in amount.

Coming now to the question of the saving in expense. As I have stated compensation agreements are executed without litigation in an overwhelming majority of cases, and there is rarely any expense whatsoever to the injured employes or their dependents,—a few dollars or even cents spent in carfare and loss of time comprises the whole of it.

In some few cases attorneys have been employed to prepare these agreements. In the majority of these their services have, in my opinion, been unnecessary. The terms of the Act are quite clear and there is no real need of legal advices unless the facts are disputed or the parties misunderstand the Act and so are reluctant to sign an agreement, or there is some difficulty in computing the wages under the somewhat obscure terms of Section 309 of the Act. If the facts are accurately stated in the agreement, the employe or the dependents cannot be imposed upon by the employer. Any error, whether due to the ignorance of the employer or employe, or a desire to over-reach the claimant, will be corrected when the agreement is filed with the Board for its approval. Even in the cases where an attorney's services are needed, the Board, exercising

its powers under Section 501, has in every case fixed the attorney's fees at a very small percentage of the amount recovered. Our Profession must, therefore, regard these cases as in the nature of semi-charitable services rendered to a needy class of claimant, much as the members of our sister profession of Medicine give a great deal of their time to relieving suffering without any substantial financial return. Even where the parties are unable to execute an agreement and a claim petition is necessary, there is often no absolute need for the services of the members of our Profession. In many of the cases the claimant has appeared in person and has suffered no detriment thereby. The Referees have a wide authority to examine and cross-examine witnesses and are instructed to use this power for the peculiar protection of both claimants and defendants who appear before them without legal advisors, and in many cases where appeals and petitions have been taken to the Board, the questions are submitted upon the face of the papers without arguments or even written briefs.

Here again, where attorneys are employed in the litigation of claim petitions the Board has carefully scrutinized their fees and expenses and have awarded fees which probably shook the Profession by their almost insignificant size; except where the sum has been very small, 5% of the total amount has been the maximum allowed while in a great majority of cases the total amount allowed for fees and expenses has been 3% or less.

And the expense of litigation other than counsel fees has been reduced to a minimum. The fact, that the Referees have heard the cases at the points most convenient to the parties has greatly reduced the expense of producing witnesses and as the hearing is set for a definite day and hour, witnesses are not required to wait at the expense of the parties about the Court for the case to be reached.

There are certain provisions of the Act which are novel. Not only whole machinery for adjusting the right to compensation differs from any system previously in force in the State, but it has no exact counterpart in any other jurisdiction. The Pennsylvania Act has followed the majority of Compensation Acts in requiring that all settlements must be made by a written agreement filed with the Board for its approval, which will be withheld unless the facts are fully stated and the compensation agreed upon is that which the Act provides. Over 14,000 agreements have been filed, examined and approved and a considerable number have been returned to the parties, because they did not conform to the terms of the Act. In every such case, the parties are informed of the particulars in

which the agreement is improper, and how it may be changed so as to meet the requirements of the Act. In practically every case a new agreement, in which the original error has been corrected, has been executed and filed.

While the adjudication of disputed cases by the Referees, who sit as court and jury and from whose decision an appeal lies to the Board, is not found in any other Compensation Act, it is modeled after the practice in California where the specific Referees are appointed for a particular case and for a particular district as and where the Industrial Board deems it necessary. It is obvious that, in a State of the size and industrial importance of Pennsylvania, to require that a member of the Board should, either alone or sitting with arbitrators selected by the parties, hear every case would lead to intolerable delay, if every case must be heard near the scene of the accident and to an equally intolerable expense and annoyance to litigants and if each case must be heard at Harrisburg or at one of the Board's principal branch offices, at Philadelphia, Pittsburgh and Scranton. So far as can be determined by five months' experience, the method adopted has proved highly satisfactory.

While I have never heard it directly stated I have obtained the impression that the Referees are regarded as inclined to favor the claimants in their decisions. Indeed it seems to be thought that all one needs to do to obtain an award is to file a claim petition. It may be interesting, therefore, to know that out of the 186 cases, of which I have a record, in which a Referee has made a decision, compensation has been awarded in 119 and disallowed in 67 cases.

The Referees have heard all cases promptly and except in a very few cases, have made their awards within the time required by the Act. They have held their hearings at the places within their districts which best accord with the convenience of all parties with the result that contested cases have been speedily decided and at very little expense to the parties. But perhaps the best work that the Referees have done has been in the prevention of litigation and in bringing the parties to a proper adjustment of a claim without litigation. I am particularly conversant with the work of the Philadelphia Referees. Every day a great part of their time is given up to giving advice to both employes and employers and in settling the disputes which arise through their ignorance and their rights and liabilities under the Act. Not only do they act as arbitrators in cases brought to them by both parties for their advice, but if an employe comes to them and states that his employer will not pay him compensation, they call up the employer and his insurance carrier and find out where the difficulty lies, and in nine

cases out of ten bring about a settlement. If, as I believe is the case, the Referees in the other districts are doing the same work, they have much more than cut in two the volume of litigation.

There has been for many years a demand for some method for the judicial ascertainment of medical facts more satisfactory than that of proof by medical experts produced and paid by the parties. In the administration of the Compensation Act, this demand has been met by giving to the Board and the Referees the power to employ impartial physicians to examine the physical condition of claimants and to report thereon. This power has been freely exercised and has proved of the greatest value. In cases involving issues in which expert medical opinion is necessary to guide the Referee, the opinion of an impartial physician has been of incalculable assistance to the Referees in deciding between the conflicting views expressed by the experts produced on both sides. Indeed employers and employes are gaining confidence in these physicians that many cases are settled on these reports without litigation.

Nothing in our law of proof seems more ridiculous than allowing expert testimony to be heard, because, without it neither the Court nor the Jury has the special knowledge needed to properly judge the value of the proven facts, and then to require the jury to decide between two diametrically opposed opinions given by experts, who, no matter how honest, have been called as witnesses because their views advance the cause of the one or the other litigant. May I suggest that while the practice before the Referees is, perhaps, not sufficient as yet to conclusively prove the advantage of the opinions given by impartial experts appointed by the Court, the Profession might with advantage give close attention to the results attained in this limited field, in order to determine whether the same powers given by the Compensation Act to the Board and to Referees might not with profit be also given to our Courts of Law.

While the experience of five months has shown that the Compensation Act has worked well and has more than met the hopes of its advocates, yet it has also been shown that there are many places in which it falls short of the ideal. I will not worry you with a catalogue of the various places where a slight change in the language of some particular section might make the Legislative intent more plain. I will, however, call to your attention a few of the more serious defects which have developed. These defects have aroused serious criticism and no doubt the Legislature will be asked to amend the Act so as to remove them.

The provisions for medical attention are undoubtedly inadequate. The duty to provide such attention begins not with the accident but with the disability. Therefore it has rested entirely with the

employer to give or refuse first aid and other medical services to a man whose injuries do not require him to lose any working time. Now this is the very time when a very little medical attention of the right sort could prevent many small cuts and other injuries from becoming serious. It is quite surprising how many trivial cuts and other injuries become infected and lead to serious consequences, even to the loss of members or to death. While many employers and insurers realize that it is to their interest to give this attention, if for no other reason than because it tends to diminish the incapacities for which they must pay compensation, yet many employers are not so far sighted and give no more than the Act requires. Then, too, it is becoming clear that more than two weeks' medical services should be furnished by the employer. If the injury is at all serious the sufferer needs such services for far longer than two weeks and, if he must pay for it out of the very moderate compensation given him, there is practically nothing left for the necessary living expenses of himself and his family, but on the other hand care must be taken not to open too wide the doors for the exploitation of the Act by the less scrupulous members of the Medical Profession. No doubt a determined effort will be made at the next session of the Legislature to so amend the Act as to require employers to give reasonable medical services without limit of time or amount. I am firmly convinced that this would be most unwise. Neither the Board nor the Referees can determine what medical services are worth. The Board has at present no jurisdiction over the charges of physicians for services rendered to an injured employe, at the request of this employer, but even so it has received so many complaints from both sides that it has become evident that if they were called upon to decide such disputes, they would have little time left for their present duties. In my opinion it would be quite enough to provide that reasonable medical services should be provided from the time of the accident until the disability has lasted eight or ten weeks, but not to exceed say \$15.00 per week. Then, too, the distinction between major and surgical operations should be abolished and a maximum of \$75.00 for all surgical services established.

On one point I feel very strongly. In principle there is no difference between the rights of a workman disabled by an industrial accident and one incapacitated by occupational disease. I agree that occupational and other diseases contracted in employment should not be covered by a Compensation Act, but I earnestly hope at the next session of the Legislature a carefully drawn Act will be passed giving compensation on the same scale as is now provided in the Compensation Act to those disabled by occupational disease in the

proper sense of the term. Such an Act, I feel convinced, should provide compensation for certain diseases which are agreed to be peculiar to certain trades. These diseases should, as in the English Act, be specified and power might properly be given to the State Department of Health to add to the number, as medical research shows that other diseases are peculiarly prevalent in other trades. Complaints are being constantly brought up by workmen against their employers to the effect that discrimination is being practiced against men who are in such physical condition as to increase their employers' risk under the Act. So far no complaints have been received that men have been denied employment because they are married and have large families, but there is much to show that men who are apt to fall and sustain injuries, such as epileptics, or men, such as the man with one arm and eye, whose physical condition is such that any injury to him, such as the loss of the other arm or eye, would make his disability greater than that of the normal man and so increase the compensation payable to him, are in many cases finding it hard to obtain and keep employment. These complaints are most prevalent against employers who because of their undoubted financial solvency have been relieved by order of the Board of insuring their compensation liability. I do not propose to discuss the ethics of such discrimination. It is enough for me that the Legislature, by providing in the sister Act regulating compensation insurance, that the premium payable by insuring employers shall not be affected by the physical impairment of employees and the extent to which the employees have persons dependent upon them for support, have pronounced such discrimination to be against the public policy of the Commonwealth. The Board has required all employers seeking the privilege of carrying compensation liability without insurance to declare it to be the policy not to practice such discrimination, but the power to revoke the privilege granted if this assurance is found to be deceptive is far from clear. In my opinion power should be expressly conferred upon the Board to consider something more than the mere financial statute of an employer seeking to be relieved from the necessity of insuring his liability under the Act and to refuse the privilege, or revoke it after it has been granted, whenever it is convinced that such discrimination is practiced or that the employer in any other way is violating the letter or spirit of the Act, which together make up the Workmen's Compensation System of the State.

There is one other matter which is giving the Board considerable concern. The Act very properly requires that every employer shall insure his compensation liability, unless he can satisfy the Board that his financial position is so secure as to make it certain that

he will be able to pay the compensation due his employes as it accrues. The penalty attached to a failure to take out insurance is, however, conditioned upon the Board having given notice to the employer to take out insurance within thirty days after the notice is received, and the penalty provided is to give to any employe, injured after the thirty days, the right to determine after the accident has been received whether he shall claim damages in an action at law under Article II with, practically, all the employer's defenses removed, or claim compensation. This penalty while severe against solvent employers has little or no coercive force over those who employ only a few men and whose assets are so small that they could not pay damages recovered against them in an action at law. In some States a money penalty is attached to a failure to take out insurance. Experience shows that such penalties are rarely, if ever, enforced. They may have a certain deterrent force, but in practice their effect is but slight. The problem is to devise some means to compel all employers to take out insurance, especially those whose business is small and whose resources are limited. There is, in my opinion, no hardship in requiring them to do so. The State Workmen's Insurance Fund has been created for the very purpose of enabling such employers to obtain insurance as near as possible to cost. A large majority of them can obtain protection at the minimum premium of \$5.00 and even this is reduced if the operations cover less than a year. Surely this is not a heavy burden to put upon even the smallest of employers. I know of nothing more difficult than to devise a method of forcing every employer to take out insurance. Fines or penalties are not enforced unless they are so heavy as to be destructive and unfair. The cost of collection is greater than the amount recovered and there is a natural reluctance to enforce money penalties. In my opinion it would be unwise, as well as impracticable, to make it a misdemeanor to employ labor without taking out insurance or to require every employer of labor to procure a license, and to show as a requisite in obtaining that license that he has taken out compensation insurance. The most numerous and serious complaints have been against small contractors who have no real estate or indeed have no plant of any considerable value. These men take a chance that no accident will happen. If one does, an award may be made against them but there is practically no way of collecting the money. Even if the contractor has some means, the process of collection, no matter how much effort is expended in making it simple and expeditious, is necessarily expensive and slow. I have given considerable thought to this problem and I must confess I have found no solution which entirely satisfies me. In order that the employe of such small con-

tractors may obtain the protection which the Compensation Law designs to give them, it may be necessary to make the persons, for whom such contractors do work, themselves liable, unless the contractors have taken out compensation insurance in some approved company or mutual association. The Board now issues certificates of insurance. If it is found that it is impossible to force small employers, particularly contractors, to take out insurance in any other way, and this method is adopted, persons employing such contractors can adequately protect themselves from liability by requiring the contractor to produce a certificate from the Board showing that he has taken out the proper insurance. No injustice can be done to the employers of such contractors. They would have full knowledge of the terms on which the work was to be done and if they did not see to it that the contractors took out insurance, they would have only themselves to blame, if they were held as guarantors of the compensation liability of those contractors whom they so employed. I believe this method, while perhaps drastic, has more promise than any other. The customers of the contractors would themselves enforce the requirements of the Act that such contractors shall take out insurance, and no contractor, who had not insured could obtain work from any prudent person.

Notwithstanding these defects and the many other minor points in which changes in the substance of the Act and in the administration features might advantageously be made, I believe that the State of Pennsylvania may rest satisfied with the results obtained in the first five months of the administration of the Compensation Law.

On the whole looking back on the five months' operation of the Act, I feel that much has been accomplished and that there is a great promise for the future. It is hard for one who has never been engaged in the work of building up an elaborate administration of this sort to appreciate the difficulties of the task. There have been, of course, mistakes. Forms have been adopted which have been shown by experience to require modification or amplification. Rules of procedure have had to be hammered out. The Board has shown that it is willing to profit by experience. It has never hesitated to make a change when experience has shown it that the change was desirable. It would be ridiculous to claim that it has secured a perfect administration. It has, however, in my opinion done more than well. I doubt whether there has been in any State so small a proportion of cases, in which the compensation due under the Act, has not been paid, and I know of no State in which relief has been more speedy or less expensive.

DEPARTMENT AIDING INJURED WORKERS TO RECEIVE WORKMEN'S COMPENSATION.

A State-wide investigation to ascertain whether compensation payments are being made to every injured worker, entitled to receive such payments, under the Workmen's Compensation Act, is being conducted under direction of Commissioner Jackson.

Although hundreds of individual cases have been found where injured workers should be receiving compensation, the investigation has disclosed that, with few exceptions, employers are endeavoring to comply with the provisions of the Compensation Act. In most instances, lack of knowledge of the provisions of the law has been responsible for delayed payments.

Delays in reporting accidents, to the Department of Labor and Industry, have been discovered and letters have been sent from the Labor Department, to every employer, large and small, known to have held up an accident report. In this circular letter, the Act of Assembly of June 19, 1913, is cited which provides that unless accident reports are made, the employer is liable to a penalty of \$100.00, following prosecution.

Paul N. Furman, Chief of the Bureau of Statistics and Information of the Labor Department, has compared reports of accidents, with the records of agreements for compensation, filed in the Compensation Bureau, to determine where compensation is not being paid to employes who have sustained injuries and suffered disability for a greater period than two weeks. This comparison has disclosed where an employer or an insurance company is not making the payments required by law.

In every case, where it appears that compensation payments should be made, Commissioner Jackson has directed Lew R. Palmer, Chief of the Bureau of Inspection, to send an inspector to the home of the injured employe to learn whether the worker is entitled to compensation, whether he is receiving it and, if not, the opinion of the employe as to why he is not receiving it.

Paul N. Furman has personally presented records of unpaid compensation to employers in Allegheny county, Philadelphia county, Lackawanna and Luzerne counties, and has learned that, as a general condition, the law has not been violated with deliberate intent.

The procedure adopted has been to supply every employer with accurate information of injuries received by his employes who are not receiving compensation. Blank report forms are also sup-

plied each employer for him to report, in detail, to the Department of Labor and Industry, why the compensation was not paid and what action is being taken to correct the condition. This method will be followed by the Department of Labor and Industry throughout the entire State.

Every employe, injured in his employment, who has not received medical attention, has been disabled for more than 14 days and has not received compensation payments, may write to the Compensation Bureau of the Department of Labor and Industry, and his case will be thoroughly investigated. This action of the Labor Department is not a campaign but is one of the continuous activities of this State agency adopted by Commissioner Jackson following the passage of the Workmen's Compensation Act.

Many letters have been received at the Bureau of Workmen's Compensation, from injured workers, inquiring whether they are entitled to receive compensation payments. The following letter of explanation is sent from the Bureau to injured workers making such inquiries:

Replying to your letter of recent date, in which you make inquiry concerning compensation, would say that an employe is not entitled to compensation unless he has been unable to work for more than fourteen days as the result of an injury received in the course of his employment.

You are entitled to medical services where the disability has been less than fourteen days. You must accept the medical services offered you by your employer for the first fourteen days.

The first step for you to take is to notify your employer that you were injured, giving the time and the nature of the accident.

After your disability has lasted more than fourteen days, you should make a request that your employer reach an agreement with you for the payment of compensation. If you are unable to reach an agreement for compensation, then you should fill out a formal petition for compensation on form W-18, copy of which I am enclosing you, and forward it to this Bureau. After this has been done, you will be notified of the time and place of hearing your case by the Workmen's Compensation Referee of your district.

AIMS AND EFFORTS OF THE BUREAU OF MEDIATION AND ARBITRATION OF THE DEPARTMENT OF LABOR AND INDUSTRY.

The Act of the Pennsylvania State Legislature, creating the Department of Labor and Industry, provides that:—"There shall be created in the Department of Labor and Industry a Bureau of Mediation and Arbitration, the head of which shall be a chief of bureau.

"Whenever a difference arises between an employer and his employes, which cannot be readily adjusted, the chief of the bureau shall proceed promptly to the locality thereof, and endeavor by mediation to effect an amicable settlement of the controversy. If such settlement cannot be effected, the dispute may be arbitrated by a board composed of one person selected by employer, and one person selected by employes, and a third who shall be selected by the representatives of the employer and the employes; and such third member of the board shall be selected and appointed within a period of five days after the matter has been submitted for arbitration, and, in the event of any such appointment or selection not being made within a period of five days, then the Chief of the Bureau of Mediation and Arbitration shall constitute the third member of the board, and be the chairman of the board; and if such third representative is chosen, by the two representatives of the employer and employe, within five days, then a chairman of the board shall be established by the board itself. A submission to the board shall be made in writing, and the parties thereto shall agree to abide by the determination of the board. Said board shall render a written decision within ten days after the completion of the investigation, one copy thereof to be filed in the bureau, and a copy to be furnished each party to the controversy. The chief of the bureau shall make an annual report of his work, containing such information as the Commissioner of Labor and Industry may request.

"The Commissioner of Labor and Industry may assign to this bureau, from his department, such clerical assistance as, from time to time, he may think necessary."

The enormous growth of the industrial life of Pennsylvania in recent decades, which has been nothing less than marvelous, together with the organization of labor unions, in all the different lines of trade, on the one hand, and associations of employers, on the other hand, have all accentuated the necessity for a medium between the employers and the employes by means of which an adjustment of differences that are inherent in the nature of our complex industrial life might be brought about.

It was in response to the very general desire upon the part of our industrial people for the establishment, by the State, of an agency whereby the benefits of the offices of mediation, conciliation and, as a last resort, arbitration, might be provided, that the Legislature of 1913 enacted into law the principle of mediation between employer and employed, in the creation of the Bureau of Mediation and Arbitration, in the Department of Labor and Industry. The wisdom of this legislation has been proved over and over again by

the activities of the Bureau in the saving of large sums of money, otherwise wasted in strikes, and also in the bringing about a better feeling between employer and employe, where through misunderstandings, discord and dissension had arisen.

The relations between capital and labor in the State of Pennsylvania during the past few years, in the main, have been amicable and satisfactory, both regarding terms of employment, and the remuneration of labor, presenting many encouraging aspects, in contrast to previous experiences; but with the coming of the war in Europe, came also industrial unrest, and the disturbance to trade which naturally follows a war of such magnitude. The munition orders in many of our shops and factories created a heavy demand for skilled and other labor with unprecedented wages, as a corollary to certain classes of workmen. This was followed by a general demand for higher wages and shorter hours with resultant disputes, strikes and lockouts, notably in the Pittsburgh district where the State militia were called into requisition for a short period.

In all of these disturbances the Bureau of Mediation and Arbitration rendered signal service to the State;—service that, in the opinion of those most vitally affected, fully justified the creation of the Bureau. In actual work, the mediator is, in many instances, the only means of interchange between the contending parties, and by his friendly offices, the parties are brought in closer relation and better understanding, resulting in a mutual appreciation of each others rights.

The one fact that stands out pre-eminently in all of these industrial troubles, is the belief, well stated by Commissioner Jackson, upon the organization of the Bureau of Mediation and Arbitration, "that there is a more sane and dependable way of adjusting industrial troubles than by strikes, which are wasteful, and a careful study of the problem of strikes fails to reveal any benefit to either capital or labor, commensurate with the expense attending them." It is to this feature of the subject that the future work of conciliation and mediation in all probability will be applied most profitably.

Just as in the Inspection Bureau, the closest co-operation exists between employers and that Bureau, with regard to the introduction of safety devices, when the employers realized, after years of education, that it was an economic saving as well as a conservation of labor, to provide these safety means, so will the different factors in the industrial world co-operate with and invite the activities of the Bureau of Mediation. Our efforts may be directed, very properly and profitably to bringing about a closer relation between labor and capital, thus enhancing a mutual appreciation for each other.

When the representatives of industrial establishments and the representatives of the employes sit down together, with their feet under the same table and talk over their differences in a calm and dispassionate way, harmony is usually the result. There is a mutual recognition of and regard for their respective rights and a cognizance of their different viewpoints which cannot fail to make the contending parties see the essential community of their interests. This results in a "getting together" spirit being engendered, and peace is the result.

After a study of the work of the Bureau, for the past three years since its activities began, the Chief Mediator is of the opinion that the work of conciliation and mediation has revealed the fact that the employers of Pennsylvania are a broadminded, liberal, progressive body of men, who are animated with a desire to maintain the industries of Pennsylvania at the top of the column in our Nation, and that the employes in the multitude of shops, factories and industrial establishments, are a body of intelligent, industrious, zealous workers who will compare, more than favorably, with any state in the Union for proficiency and efficiency in their work. It is because of these two important facts that Pennsylvania enjoys the front rank industrially.

Why should not all industrial trouble incident to our complex civilization be compromised by intelligent, disinterested conciliation and mediation? All that is needed to continue the pleasant relations is mutual respect and forbearance on both sides and a mutual recognition of the rights of property and of the dignity and worth of labor.

Perhaps the most important factor in an employer's success in business is to have in his employ a contented, happy, prosperous body of employes. This is evidenced by the many movements on the part of both, for welfare work, and by the establishments of pleasant relations resulting from the many betterment schemes, creating an *esprit de corps* among the workmen.

Among the causes that produce friction in our industrial life, and work for the mediator, is the adjustment of those perfectly natural differences between capital and labor, that always have existed and always will last, while there is a law of supply and demand and while competition exists. On the one hand the employer has the ever-pleasant problem of keeping the cost of production at a profitable relation to the selling price, and on the other hand, the apparently increasing cost of living, makes the employe alert to the question of an ascending scale of wages. The increasing demand of modern life upon the time element, makes the question of

a shorter workday a paramount issue among the workmen. General Garfield said in a Chautauqua speech in 1880, that "the industrial struggle of the ages has been a struggle for more leisure."

In recognition of these perfectly legitimate desires upon the part of labor, many employers have instituted various profit-sharing systems. These have tended to bring about a better feeling and a closer fellowship between employer and employe with a consequent tendency to preserve industrial peace. Other systems of co-operation in the establishment of different projects for the happiness, the betterment and the educational advancement of workmen have been productive of mutual harmony, and have resulted in a greater production both in quantity and in quality.

The Bureau of Mediation and Arbitration for all questions that may arise between employer and employe, offers an impartial official agency, to which, through mediatory effort, both may turn for relief. It is rare that after full investigation and consideration, conciliatory efforts prove unsuccessful in bringing about a speedy settlement of the difficulty. Prompt efforts upon the part of the mediator, before the rising passion, or other improper spirits get the better of calm judgment, usually result in preventing protracted strife, ill-will, and money loss without compensating gain.

It is confidently believed, that the aid given by the Bureau of Mediation and Arbitration in the adjustment of many strikes and industrial disputes during the past three years, commends it favorably to the employers and employes, as well as to the whole people of Pennsylvania.

STATE INSTITUTIONS AS WELL AS PRIVATE PLANTS ARE BEING INSPECTED BY THE BUREAU OF INSPECTION FOR THE ADVANCEMENT OF SAFETY.

As a result of the inspections of State institutions being made by the Bureau of Inspection, conditions that tend to the safety and welfare of the inmates are being improved. All elevators and boilers in these institutions, are being rigidly examined as well as other factors that mean safety from fire and similar hazards. Up to this time more than twenty State buildings have been inspected. In each case the recommendation was made that a special mechanic at the institution be appointed to make monthly inspections of apparatus to make sure that all equipment is maintained properly safe and efficient.

Safeguards Must Conform to Industrial Board Standards.

It has recently been brought to the attention of the Bureau of Inspection that certain manufacturers of safeguards are accepting contracts and installing their guards on machinery in Pennsylvania industrial establishments in spite of the fact that these guards do not comply with the Safety Standards formulated by the Industrial Board. Misunderstandings have resulted, especially regarding safeguards for belts. Every inspector is directed not to sanction the use of any safeguards which do not meet the requirements of the Industrial Board set forth in the Safety Standards for Power Transmission Machinery. These Standards require that guards installed within six inches of belts on machines to be guarded, may be of mesh or grating with apertures not greater than one-half inch between members in any direction. However, where the guard is placed more than six inches from the apparatus, the openings between members of the guard may be two inches.

In some industrial plants, inspectors found that guards with apertures of one and one-quarter inches were being placed on machines and belts at distances of only three or four inches from the apparatus, in direct violation of the Safety Standards. Manufacturers of such guards as have come to the notice of the inspectors have been notified, from this Department, that strict adherence to the Safety Standards is required. Manufacturers installing safeguards are advised to familiarize themselves with the Power Transmission Standards in order that any safety installations that they may make will be approved by the inspectors.

Rules have recently been adopted, by the Industrial Board, to permit belts of one inch or less to be unguarded; also to permit cone pulleys and belts operating on cone pulleys to be unguarded. The Board, however, recommends that guards be placed on cone pulleys and belts wherever feasible and that shifting devices be installed. It was found that virtually every other inspection agency was eliminating these safety features as working an unnecessary hardship upon manufacturers and for this reason the Industrial Board took action to make their safeguards conform with the most recent practice.

An Employer Converted to Elevator Safeguard.

An elevator inspector, of this Department, recently reported improvements he had recommended for an elevator operating in an enclosed shaft with the hatchway supposed to be protected by trap doors. The inspector brought forth protests from the owner by insisting on installation of gates at the elevator entrances. On his second visit the inspector found that his instructions had not been

adopted. Finally the inspector and proprietor of the establishment walked into the shop; the doors of the elevator stood half open. The proprietor closed the doors after remarking that he had never seen them open before. The elevator car descended and when it was about two feet below the floor level an employe ran to the elevator opened the gate and jumped to the car. When the car returned upward the inspector and proprietor entered it with a workman pushing a truck. When the car reached an upper floor the workmen recklessly pushed the truck from the elevator without stopping the car. The proprietor was alarmed by the action and immediately ordered the installation of proper safeguards.

The Safety Standards, for Elevators, recently adopted by the Industrial Board became operative on July 1. All elevator companies have been notified that hereafter approved plans for the installations must be submitted to the Department of Labor and Industry before any erection work is started. Application for a permit to erect an elevator, for which plans are submitted, must accompany the plans. Blank application forms, for this purpose, are furnished by the Department.

Co-operation of Manufacturers Solicited.

The Department requests co-operation of manufacturers in meeting instructions issued by inspectors for the installation of safeguards. During the month of June, 1,128 instructions were issued and 749 compliance notices were received indicating that, according to correspondence records, 379 instructions have not been met. This balance is too large. It is not the desire of the Commissioner of the Department to institute prosecutions on overdue instructions but to bring about their fulfillment through co-operative efforts of the manufacturers with the Department. Unfortunately some employers overlook the instructions or relegate them to pigeon-holes until another visit of the inspector when requests for extensions of time are made. The Commissioner of the Department seeks co-operation rather than the opportunity of invoking police powers. Instructions of inspectors are issued for the conservation of the lives and health of employes and as such are of vital importance.

Will Inspect School Buildings.

Inspectors, of the Department, will hereafter inspect public school buildings within the Commonwealth and make recommendations in respect to fire risk.

As a result of a conference between members of the Industrial Board, and Dr. N. C. Schaeffer, State Superintendent of Public Instruction, it has been decided that inspectors of the Department of

Labor and Industry shall deal with fire escape problems and similar fire hazards in school buildings. Though the Department of Education desires this service of the Department of Labor and Industry, the school authorities will remain active in the same direction. Other faulty conditions inspectors may observe will be reported to Commissioner Jackson and referred to Superintendent Schaeffer for the information of the school authorities.

Results of Examinations of Boiler and Elevator Inspectors.

In the first examination, held by the Department of Labor and Industry, for the issuance of commissions to inspectors of boilers and elevators, authorized to act for the Commonwealth, 118 qualified as boiler inspectors and 104 as elevator inspectors.

These examinations, according to Section 3, of the Rules and Regulations of the Industrial Board for the administration of the Boiler Code will be held at Harrisburg, or elsewhere, four times each year, namely, the first Wednesday in February, May, August and November. The inspectors qualifying in the first examination held in May are as follows:

APPROVED BOILER INSPECTORS.

- Albert C. Armstrong, 933 N. Fourth St., Camden, N. J.—Maryland Casualty Co.
- F. W. Alberty, 911 Boulevard, E. Weehawken, N. J.—Royal Indemnity Co.
- George E. Albert, 4111 Pennsgrove St., Philadelphia, Pa.—Hartford Steam Boiler Inspection & Insurance Co.
- John Allen, 715 North 6th Street, Allentown, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- R. B. Ambrose, 3383 Parkview Ave., Pittsburgh, Pa.—State Boiler Inspector of Allegheny Co.
- George U. Best, 227 E. Chestnut Street, Lancaster, Pa.—Ocean Accident & Guar. Co.
- Thomas A. Burns, 60 Weequahic Avenue, Newark, N. J.—Ocean Accident & Guar. Co.
- George D. Bragdon, 5640 Hunter Street, Philadelphia, Pa.—General Accident & Ins. Corp.
- Walter H. Boggs, 415 Walnut Street, Philadelphia, Pa.—Travelers Indemnity Co.
- W. F. Brennan, 792 Main Street, Paterson, N. J.—Fidelity & Casualty Co. of New York.
- H. H. Beadling, 309 Walnut Street, Philadelphia, Pa.—Royal Indemnity Co.
- G. J. Barry, 425 Walnut Street, Philadelphia, Pa.—U. S. Casualty Co.
- Frank P. Baker, 305 Putnam Street, Scranton, Pa.—Travelers Indemnity Co.

- Raymond H. Boggs, 415 Walnut Street, Philadelphia, Pa.—Travelers Indemnity Co.
- W. A. Boyer, 840 Washington Street, Reading, Pa.—Fidelity & Casualty Co.
- Albert E. Bonnett, 100 William Street, New York—Hartford Steam Boiler, Inspection & Ins. Co.
- John W. Bowles, Finleyville, Pa.—Ocean Accident & Guar. Co.
- A. J. Bell, 2931 Taggart Street, N. S., Pittsburgh, Pa.—State Steam Boiler Inspector of Allegheny Co.
- J. Batty, Bessemer Bldg., Pittsburgh, Pa.—care of J. L. Rivolta, Fidelity Casualty Company of New York.
- Harvey K. Carter, 5426 Baltimore Avenue, Philadelphia, Pa.—Maryland Casualty Co.
- Mark Clunk, 1807 Arrott Bldg., Pittsburgh, Pa.
- Albert Coleman, 908 Keyser Bldg., Baltimore, Md.—Travelers Indemnity Co.
- S. R. Campbell, 330 Walnut Street, Philadelphia, Pa.—Fidelity & Casualty Co., of N. Y.
- G. W. Coleman, 908 Keyser Bldg., Baltimore, Md.—Travelers Indemnity Co.
- G. F. Conner, 1010 Garrett Bldg., Baltimore, Md.—Fidelity & Casualty Co., of N. Y.
- William Carrie, 17 Arthur Street, Binghamton, N. Y.—Hartford Steam Boiler Inspection & Ins. Co.
- A. B. Cowfer, 1216 William St., Philadelphia, Pa.—Ocean Accident & Guar. Co.
- Thomas F. Connery, 318 W. 11th Street, Tyrone, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- Alfred Ernest Cozons, 11 Alden Avenue, Albany, N. Y.—Globe Indemnity Co.
- James Coyne, 773 Mont Clare Street, Pittsburgh, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- William H. Dashields, Baltimore, Md.—Maryland Casualty Co.
- Leon Daniels, 908 Keyser Bldg., Baltimore, Md.—Travelers Indemnity Co.
- Andrew H. Dreger, 324 Walnut Street, Philadelphia, Pa.—Maryland Casualty Co.
- Thomas Dowd, 6440 Haverford Avenue, Philadelphia, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- George H. Davis, Runnemede, Camden County, N. J.—Hartford Steam Boiler Inspection & Ins. Co.
- Harry S. Echternach, 418 Hummel Street, Harrisburg, Pa.—Maryland Casualty Co.
- E. J. Enoch, 123 S. 5th Street, Darby, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- Andrew G. Erickson, 56 Maiden Lane, N. Y.—Employers Liability & Assurance Co.
- W. P. Eales, Examiner, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.

P. U. Farley, 421 W. Main Street, Bloomsburg, Pa.

Charles E. Flickinger, 219 Franklin Street, Hanover, Pa.

A. J. Foran, 80 Marshall Street, Paterson, N. J.—Fidelity & Casualty Co. of N. Y.

H. Alan Floyd, 540 Seneca Street, South Bethlehem, Pa.—Bethlehem Steel Co.

Edward J. Finley, 1733 S. Second Street, Philadelphia, Pa.—Maryland Casualty Co.

L. V. Flanders, 914 W. North Avenue, Pittsburgh, Pa.—Hartford Steam Boiler Inspection & Ins. Co.

C. W. Gegenheimer, 833 Weiser Street, Reading, Pa.—American Casualty Co.

William C. Gratz, 6442 Haverford Avenue, Philadelphia, Pa.—Hartford Steam Boiler Inspection & Ins. Co.

George Griesel, Jr., 3635 N. Percy Street, Philadelphia, Pa.—Maryland Casualty Co.

Thomas Gillen, 2819 Aramingo Avenue, Philadelphia, Pa.—Travelers Insurance Co.

Henry Garlick, 6723 Greenwood Avenue, Pittsburgh, Pa.—State Steam Boiler Inspector of Allegheny Co.

Robert P. Gilray, Marine Bank Bldg., Buffalo, N. Y.—Hartford Steam Boiler Inspection & Ins. Co.

W. L. Heesemann, 1972 Perkiomen Avenue, Reading, Pa.—Travelers Indemnity Co.

William D. Hamilton, 24 Lee Avenue, Trenton, N. J.—Travelers Insurance Co.

Henry L. Hoeltzel, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.

Kirtland F. Hale, 56 Maiden Lane, N. Y.—Employers Liability & Assurance Co.

William Innes, 920 Marine Bank Bldg., Buffalo, N. Y.—Globe Indemnity Co.

Ned B. Johnson, 55 John Street, New York—London Guarantee & Accident Corp.

Leo Jackson, Woodlawn P. O., Md.—Maryland Casualty Co.

D. R. Killinger, 36 E. James Street, Lancaster, Pa.—Ocean Accident & Guar. Corp.

W. J. Knepp, Belleville, Pa.—Hertzler & Zook Co.

William J. Kane, 425 Walnut Street, Philadelphia, Pa.—Travelers Indemnity Co.

Harry Keefe, 802 Matthew Avenue, Scranton, Pa.—U. S. Casualty Co.

C. E. Kling, 109 S. Fourth Street, Allentown, Pa.—Hartford Steam Boiler Inspection & Ins. Co.

John H. Korner, 230 Woodlawn Avenue, Buffalo, N. Y.—Ocean Accident & Guar. Co.

LeMott R. Lenoard, 250 Crossland Avenue, Uniontown, Pa.—Uniontown Construction Co.

- John MacCollum, 56 Wood Street, Wilkes-Barre, Pa.—The MacCullum Co.
- Cornelius Martin, 548 Carey Avenue, Wilkes-Barre, Pa.—Travelers Indemnity Co.
- Stanley L. Morton, 2446 Cedar Street, Philadelphia, Pa.—U. S. Casualty Co.
- John T. Moore, 324 Walnut Street, Philadelphia, Pa.—Maryland Casualty Co.
- Richard D. Metts, 636 S. 59th Street, Philadelphia, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- John Mitchell, 3702 Belair Road, Baltimore, Md.—Globe Indemnity Co.
- George Leroy Miller, 415 Walnut Street, Philadelphia, Pa.—The Travelers Indemnity Co.
- Joseph Murphy, 800 Greenfield Avenue, Pittsburgh, Pa.—State Steam Boiler Inspector.
- Fred W. Muthert, 824 N. Fulton Avenue, Baltimore, Md.—Maryland Casualty Co.
- C. F. Matson, care of E. E. Mueller, 406 Ellicott Square, Buffalo, N. Y.—Fidelity & Casualty Co.
- Simon O'Day, Chamber of Commerce Bldg., Buffalo, N. Y.—Travelers Insurance Co.
- Thomas T. Parker, 92 Liberty Street, New York City—Fidelity & Casualty Co. of N. Y.
- Edward G. Rost, 36 N. Third Street, Harrisburg, Pa.—Maryland Casualty Co.
- B. H. Remaly, Scranton, Pa.—Globe Indemnity Co.
- R. W. Robinson, 416 Walnut Street, Philadelphia, Pa.—Ocean Accident & Guar. Co.
- Clayton H. Robson, 640 Yewdell Street, Hartford Steam Boiler Inspection & Ins. Co.
- Albert George Reoch, 1297 St. Johns Place, Brooklyn, N. Y.—Hartford Steam Boiler Inspection & Ins. Co.
- T. H. Rinn, 220 Taylor Street, Pittsburgh, Pa.—Maryland Casualty Co.
- Alfred Roemer, 1332 Oneida Street, Pittsburgh, Pa.—State Steam Boiler Inspector of Allegheny Co.
- Oliver M. Shoe, 5001 Florence Avenue, Philadelphia, Pa.—Penna. Mfg. Asso. Cas. Inc.
- Arthur H. Seifts, 34 Dongan Street, Elmhurst, L. I.—Hartford Steam Boiler Inspection & Ins. Co.
- Edward Stallknecht, Jr., Philadelphia, Pa.—Maryland Casualty Co.
- John M. Sheriff, 446 81st Street, Brooklyn, N. Y.—Royal Indemnity Co.
- Edward F. Shallow, Jr., 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- S. M. Stevenson, 104 Monroe Street, Grove City, Pa.
- D. A. Stark, 514 S. Wilbur Avenue, Sayre, Pa.—Lehigh Valley R. R.
- James E. Speed, 127 Sass Street, Erie, Pa.—City of Erie.

- H. L. Sheppard, 731 Somerset Street, Johnstown, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- William K. Scott, 113 Bayview Avenue, Jersey City.—Royal Indemnity Co.
- Edward V. Starner, 555 W. College Avenue, York, Pa.
- George E. Tully, 30-42 E. 42nd Street, New York City.—Travelers Insurance Co.
- D. C. Tomlinson, Mansfield, Pa.—Mansfield Shops and Foundry.
- Leo Turnbull, Hillside Avenue, Chatham, N. J.—Globe Indemnity Co.
- Dion W. Taylor, 2062 E. Pickwick Street, Philadelphia, Pa.—Maryland Casualty Co.
- Alvin S. Talman, 1412 Princess Avenue, Camden, N. J.—Hartford Steam Boiler Inspection & Ins. Co.
- William J. Triggs, 2414 E. Hazzard Street, Philadelphia, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- Charles T. Vandergrift, 730 Chestnut Street, Columbia, Pa.—Crescent Pipe Line Co.
- S. T. Vandergrift, 107 Natchez Street, Pittsburgh, Pa.—Maryland Casualty Co.
- Edward S. VanWort, 1945 E. 14th Street, Brooklyn, N. Y.—Hartford Steam Boiler Inspection & Ins. Co.
- George R. Whitman, 927 N. Fourth Street, Reading, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- Thomas J. Wilson, 415 Walnut Street, Philadelphia, Pa.—Travelers Indemnity Co.
- T. M. Washburne, RR 2 Tunkhannock, Pa.—(State Approved).
- Henry J. Willard, 28 Stowe Street, Ingram, Pittsburgh, Pa.—U. S. Casualty Co.
- J. C. Weixel, care of J. L. Rivolta, Bessemer Bldg., Pittsburgh, Pa.—Fidelity & Casualty Co.
- William Young, 648 N. 15th Street, Philadelphia, Pa.—Globe Indemnity Co.
- Samuel W. Zerr, 243 Reed Street, Reading, Pa.—Reading Scale & Machine Works.
- Thomas McCabe, 455 Water Street, Elmira, N. Y.—Maryland Casualty Co.
- Emanuel McGinley, 1511 Edgemont Avenue, Chester, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- D. E. McHenry, 1232 E. State Street, Trenton, N. J.—Hartford Steam Boiler Inspection & Ins. Co.
- Robert Grey MacCulloch, 415 Graham Avenue, Paterson, N. J.—Hartford Steam Boiler Inspection & Ins. Co.
- John McGinley, 314 E. 10th Street, Chester, Pa.—Hartford Steam Boiler Inspection & Ins. Co.
- William Henry McKnight, 219 Little Street, Bellville, N. J.—Travelers Ins. Co.
- Hector D. MacIntyre, 250 Sherman Avenue, New York City.—Globe Indemnity Co.

APPROVED ELEVATOR INSPECTORS.

- Joseph B. Allcutt, 1640 S. 54th Street, W. Philadelphia, Pa.—The Fidelity & Deposit Co. of Baltimore.
- F. W. Alberty, 811 Blvd., E. Weehawken, N. J.—Royal Indemnity Co.
- Harry E. Anderson, 56 Maiden Lane, New York—Employers Liability & Assurance Co.
- Albert C. Armstrong, 933 N. 4th Street, Camden, N. J.—Maryland Casualty Co.
- Albert C. Baker, 421½ Walnut Street, Philadelphia, Pa.—General Accident Assurance Corporation.
- Garrett J. Barry, 425 Walnut St., Philadelphia, Pa.—U. S. Casualty Co.
- George D. Bragdon, 5640 Hunter Street, Philadelphia, Pa.—General Accident, Fire, Life Assurance Corp., Limited.
- Walter H. Boggs, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- Frank P. Baker, 305 Putnam Street, Scranton, Pa.—Travelers Insurance Co.
- George U. Best, 227 E. Chestnut Street, Lancaster, Pa.—Ocean Accident & Guaranteed Corp., Ltd.
- H. H. Beadling, 309 Walnut Street, Philadelphia, Pa.—Royal Indemnity Co.
- William C. Bryant, 306 Lincoln Road, Brooklyn, N. Y.—Casualty Co. of America.
- W. H. Barrett, 464 Chestnut Street, Arlington, N. J.—The Fidelity & Casualty Co., of New York.
- Henry G. Bennett, 911 Union Avenue, N. S., Pittsburgh, Pa.—Aetna Life Insurance Co.
- John H. Bowles, Finleyville, Pa.—The Ocean Accident & Guarantee Corp.
- August Black, 343 W. 11th Street, Erie, Pa.—Travelers Insurance Co.
- O. H. Brede, care of M. E. Wolff Co., 106 Powers Bldg., Rochester, N. Y.—The Fidelity & Casualty Co.
- Frank A. Conover, Riverside, N. J.—Standard Accident Insurance Co.
- Samuel G. Crossley, 2424 W. Allegheny Avenue, Philadelphia, Pa.—U. S. Fidelity & Guaranty Co.
- Alfred Ernest Cozens, 11 Alden Avenue, Albany, N. Y.—Globe Indemnity Co.
- A. B. Cowfer, 1216 William Street, Philadelphia, Pa.—Ocean Accident & Guarantee Corp.
- John L. Cooke, 434 Walnut Street, Philadelphia, Pa.—London Guarantee & Accident Co.
- James M. Counell, 1102 Commonwealth Bldg., Pittsburgh, Pa.—Travelers Insurance Co.
- Clarence J. Collins, 1102 Commonwealth Bldg., Pittsburgh, Pa.—Travelers Insurance Co.
- William Downham, Jr., 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.

- George G. Dyer, 221 Cumberland Street, Brooklyn, N. Y.—Frankfort General Insurance Co.
- Charles Downham, 3509 Frankford Avenue, Philadelphia, Pa.—Penna. Mfg. Asso. Casualty Insurance Co.
- Andrew H. Dreger, 324 Walnut Street, Philadelphia, Pa.—Maryland Casualty Co.
- William Dashields, Baltimore, Md.—Maryland Casualty Co.
- George A. Dickson, 10th Floor, Arrott Bldg., Pittsburgh, Pa.—London Guarantee & Accident Co.
- W. P. Eales, Examiner, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- E. A. Erickson, 407 Walnut Street, Philadelphia, Pa.—Aetna Life Insurance Co.
- Harry S. Echternach, 418 Hummel Street, Harrisburg, Pa.—Maryland Casualty Co.
- Harry B. Eichmann, 3406 Keim Street, Philadelphia, Pa.—Travelers Insurance Co.
- Edward J. Finley, 1733 S. 2nd Street, Philadelphia, Pa.—Maryland Casualty Co.
- Walter S. Ferguson, 5726 DeLancey Street, Philadelphia, Pa.—Bureau of Elevators, City of Philadelphia, Pa.
- Charles H. Foy, 1021 Kerper Street, Philadelphia, Pa.—Globe Indemnity.
- Charles Flint, 2302 Winfield Avenue, Scranton, Pa.—Mass. Bonding & Insurance Co.
- Donald N. Frazier, 806 S. Cecil Street, W. Philadelphia, Pa.—American Mutual Liability Insurance Co., of Boston.
- Hamilton S. Frazine, 1532 Commercial Trust Co., Philadelphia, Pa.—American Mutual Liability Insurance Co., of Boston.
- Thomas Gillan, 2819 Aramingo Ave., Philadelphia, Pa.—Travelers Insurance Co.
- George Griesel, 3665 N. Percy Street, Philadelphia, Pa.—Maryland Casualty Co.
- William L. Heesemann, 1972 Perkiomen Avenue, Reading, Pa.—Travelers Insurance Co.
- M. F. Hatcher, 5631 Rodman Street, Philadelphia, Pa.—Employers Liability & Assurance Co.
- Harris H. Hunter, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- R. E. Howard, care of S. H. Pool, 330 Walnut Street, Philadelphia, Pa.—Fidelity & Casualty Co.
- Nicholas K. Hower, 2523 E. Monument Street, Baltimore, Md.—U. S. Fidelity & Deposit Co. of Maryland.
- Hervey L. Hoeltzel, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- W. D. Hamilton, 24 Lee Avenue, Trenton, N. J.—Travelers Insurance Co.
- Edgar E. Hammond, 16th & Candover Sts., Wilmington, Delaware, Employers Liability Assurance Co.

- William Innes, 920 Marine Bank Bldg., Buffalo, N. Y.—Globe Indemnity Co.
- Leo Jackson, Woodlawn, P. O., Md.—Maryland Casualty Co.
- L. A. B. Johnson, 2220 St. James Terrace, Philadelphia, Pa.—Travelers Insurance Co.
- Edward A. M. Knor, 1113 Return Street, N. S., Pittsburgh, Pa.—City of Pittsburgh, Pa.
- John H. Korner, 230 Woodlawn Street, Buffalo, N. Y.—Ocean Accident & Guarantee Co.
- D. R. Killinger, 36 E. James Street, Lancaster, Pa.—Ocean Accident & Guarantee Co.
- Walter Lindenberg, 1332 Columbia Avenue, Baltimore, Md.—Maryland Casualty Co.
- Robert D. McGregor, 56 Maiden Lane, New York City.—Employers Liability and Assurance Co.
- Frank McPherson, 921 Chestnut Avenue, Altoona, Pa.—New Amsterdam Casualty Co.
- Thomas McCabe, 445 W. Water Street, Elmira, N. Y.—Maryland Casualty Co.
- Hector D. MacIntyre, 250 Sherman Avenue, New York City.—Globe Indemnity Co.
- Frank E. McManus, 3607 Penn Avenue, Pittsburgh, Pa.—Public Safety Department.
- David D. McLean, 1102 Commonwealth Bldg., Pittsburgh, Pa.—Travelers Insurance Co.
- Cornelius Martin, 548 Carey Avenue, Wilkes-Barre, Pa.—Travelers Insurance Co.
- John F. Moore, 324 Walnut Street, Philadelphia, Pa.—Maryland Casualty Co.
- John Mitchell, 3702 Belair Road, Baltimore, Md.—Globe Indemnity Co.
- Fred W. Muthert, 824 N. Fuller Avenue, Baltimore, Md.—Maryland Casualty Co.
- Edwin L. Moser, 1509 Perkiomen Avenue, Reading, Pa.—American Casualty Co.
- Melvill L. Merrill, 434 Walnut Street, Philadelphia, Pa.—London Guarantee & Accident Co.
- John J. Marsula, Benedum Trees Bldg., Pittsburgh, Pa.—Aetna Life Insurance Co.
- George P. May, 307 Fourth Avenue, Pittsburgh, Pa.—Travelers Insurance Co.
- George W. Murphy, 1922 Union Avenue, Altoona, Pa.—Travelers Insurance Co.
- William F. O'Brien, 2949 Wilder Street, Philadelphia, Pa.—Penna. Mfg. Asso. Casualty Co.
- Simon O'Day, Buffalo, N. Y.—Travelers Insurance Co.
- James D. Pronk, 7 Cedar Place, Yonkers, N. Y.—Casualty Insurance Co. of America.

- Frank S. Pronk, 7 Cedar Place, Yonkers, N. Y.—Casualty Insurance Co. of America.
- Otty F. Parlee, 407 Walnut Street, Philadelphia, Pa.—Aetna Life Insurance Co.
- George F. Phalen, 6111 Ellen Avenue, Cleveland, Ohio.—Fidelity & Casualty Co. of New York.
- W. W. Palmer, 1125 Wareman Avenue, Pittsburgh, Pa.—Maryland Casualty Co.
- R. W. Robinson, 416 Walnut Street, Philadelphia, Pa.—Ocean Accident & Guarantee Co.
- Harry Rosewarne, 1706 St. Paul Street, Philadelphia, Pa.—Employers Liability & Assurance Corp.
- Joseph B. Rotan, 6120 Master Street, Philadelphia, Pa.—General Accident, Fire & Life Insurance Co.
- B. H. Remaly, 801 Peoples Bank Bldg., Scranton, Pa.—Globe Indemnity Co.
- G. T. J. Rogers, 1550 Woodward Avenue, Lakewood, Ohio.—Maryland Casualty Co.
- Oliber M. Shoe, 5001 Florence Avenue, Philadelphia, Pa.—Penna. Mfg. Asso. Casualty Insurance Co.
- Edward F. Shallow, Jr., 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- William E. Sharp, 407 Walnut Street, Philadelphia, Pa.—Aetna Life Insurance Co.
- John M. Sheriff, 446 81st Street, Brooklyn, N. Y.—Royal Indemnity Co.
- Edward Stallnecht, Jr., 324 Walnut Street, Philadelphia, Pa.—Maryland Casualty Co.
- Guy H. Stevens, 130 Linden Avenue, Haddonfield, N. J.—Employers Liability Assurance Co.
- William T. Stansfield, 307 Fourth Avenue, Pittsburgh, Pa.—Globe Indemnity Co.
- T. J. Scanlon, 304 Olcott Avenue, Crofton, Pittsburgh, Pa.—Maryland Casualty Co.
- T. H. Thompson, 6410 Phillips Avenue, Pittsburgh, Pa.—Ocean Accident & Guarantee Co.
- Dion W. Taylor, 2062 E. Pickwick Street, Philadelphia, Pa.—Maryland Casualty Co.
- Leo Turnbull, Hillside Avenue, Chatham, N. J.—Globe Indemnity Co.
- William Uttinger, 267 Norfolk Street, Newark, N. J.—Franklin General Ins. Co.
- S. T. Vandergrift, 107 Natchez Street, Pittsburgh, Pa.—Maryland Casualty Co.
- Thomas J. Wilson, 415 Walnut Street, Philadelphia, Pa.—Travelers Insurance Co.
- William S. Watson, 5817 Springfield Avenue, Philadelphia, Pa.—Otis Elevator Co.

- John Wendel, 192 Cornelia Street, Brooklyn, N. Y.—Frankfort General Ins. Co.
- Samuel Weber, Jr., 331 Walnut Street, Philadelphia, Pa.—Globe Indemnity Co.
- Robert Walsh, 711 Highpoint Avenue, West Hoboken, N. J., Casualty Co. of America.
- H. J. Willard, Ingram, Pittsburgh, Pa.—U. S. Casualty Co.
- H. L. Piening, 201 Columbia Bank Bldg., Pittsburgh, Pa.—U. S. Casualty Co.

INFLAMMABLE MATERIAL MUST BE HANDLED CAREFULLY.

The absolute necessity of using care and caution in the handling of inflammable products, such as gasoline and benzine, is repeatedly indicated in the accident reports which are coming into the Department at the rate of almost 1,000 a day.

One fatality in the eastern part of the State occurred in an unusual manner and an important lesson can be drawn from this accident.

Two men were engaged in cleaning the engine of an automobile. They were spraying the gasoline used for cleaning purposes, by means of an air hose used to inflate the tires. An open bucket which contained some of the gasoline slipped down off the mudguard of the machine and came in contact with the storage battery. An electric spark was immediately generated and this ignited the gasoline which was being used to clean the engine.

The first employe seeing the flash rushed forward and pushed away the man who was doing the spraying. Just as he did so, the gasoline in the bucket which he was carrying, caught fire and flashed up in his face. He died as a result of the burns he received.

The practice of using gasoline for cleaning purposes is very prevalent throughout the State, not only in industries, but also in private homes.

It is absolutely impossible to prevent accidents of this kind unless the public generally will discontinue the practice of carrying or leaving inflammable materials of this description in open buckets. Under no circumstances should any quantity of gasoline be allowed in any establishment unless it is in an approved type of safety cans, and if it is necessary to use this substance for cleaning purposes it should be done only in the open air and with every facility ready for protection against the accidental ignition of the material.

Another case recently occurred in the western part of the State where inflammable material was taken out of a pipe in close proximity to gas heated furnaces. The workman who was attempting to take the material out of the pipe, in some manner, allowed some of the material to be spilled; the vapor caught fire and as a result of the burns he received, he also died.

These two accidents and many more which are happening from day to day should serve to point out the necessity of handling inflammable material of this kind with the greatest caution.

PREVENTABLE ACCIDENTS.

A workman in a mill wished to clean out a three-inch pipe line. He expected to take a three-quarter inch pipe and push this through the larger pipe to do so. As he endeavored to insert the small pipe into the larger one, it caught in a pulley near-by. As a result the man was whirled around the shaft and received injuries from which he died the same day.

It is absolutely necessary for persons to keep watch when they are handling any material, in any place, in order that they may not injure themselves or any other person.

* * * *

A repair man entered the compartment in which conveyor machinery was working. It was a standing rule at this plant that no employe should enter that place until the machinery had been shut down. Contrary to these orders, however, he entered while the machinery was in motion, was caught and crushed; his death was almost instantaneous. It is absolutely suicidal to attempt to make repairs or adjustments about this kind of machinery while it is in motion.

A man was engaged in lowering a seven-ton casting by means of a crane operated by hand. While the casting was in mid-air the handle broke, flew off and hit the worker, fracturing his skull.

If periodic, rigid examinations had been made of this piece of hoisting material no doubt the defect would have been detected.

* * * *

An electrical construction man had work to do some distance above the ground. He hastily constructed a scaffold and, standing on it, began his work. An old board, on which he was standing, broke and

he fell to the brick floor beneath, a distance of thirteen feet, breaking his neck and dying almost instantly. In this particular instance there were plenty of sound boards lying around. Scaffolds should be of safe construction and made only of sound material. If a practice is made of using only the material which is at hand, and which may be defective, sooner or later an accident is bound to occur.

* * * *

In the eastern part of the State a laborer had descended into a cess-pool to replace a lifeline on a fellow employe who had been overcome by foul air. The unconscious man was raised to the surface and revived while his rescuer was overcome and suffocated before he could be brought to the surface.

In another instance, in the central part of the State, two men lost their lives in a sewer excavation in the same manner. One of these men was first overcome and the second made the attempt to rescue him without first securing assistance. He, too, was overcome and before help could reach them both were dead.

These deaths show the necessity of preventing employes going into any place where there may be asphyxiating or poisonous gases, fumes or vapors, unless they wear a suitable helmet, which will supply them with fresh air, and have also attached to themselves a lifeline which is held in the hand of a fellow employe.

* * * *

The disadvantage of wearing loose clothing was strikingly illustrated in an accident which recently occurred to a milling machine operator. While reaching over the milling machine the loose sleeve of the operator caught on the cutter and his arm was severely injured.

Every workman, especially machine operators, should have their clothing in such shape that it is impossible for any loose ends to be caught in moving machinery.

* * * *

Another employe was unrolling a roll of roofing paper on the roof of a building. There was a break in the paper and as the roofer was walking backwards, pulling the paper, the end in his hand was suddenly released from the roll. He tumbled backward over a parapet, at least two feet four inches higher than the roof, and fell to the ground three stories below.

To avoid any possibility of accident all employes working in dangerously high places should have a lifeline attached to them at all times.

INSPECTION OF LABOR CAMPS TO BE MADE BY BUREAU OF EMPLOYMENT OF DEPARTMENT OF LABOR AND INDUSTRY.

According to Act 397, Section 18, the Commissioner of Labor and Industry is given charge of the work of inspecting labor camps and prescribing for them, minimum standards of sanitation. This duty has been given by the Commissioner into the hands of the Director of the Employment Bureau who has been making preparations for the carrying out of these instructions.

As a preliminary step, letters have been sent to all the railroads of the State asking for a list of their camps. The letter, a copy of which follows, explains for itself the purpose of the Department's activities along this line.

This Department is planning inspection of all labor camps and housing accommodations for employes in the State. The object is to enable the Department to prescribe minimum standards of sanitation as required by Section 18 of Act 397 passed by the last General Assembly, and reading as follows:

"The Commissioner shall inspect all labor camps and housing accommodations for employes, maintained directly or indirectly in connection with any work or place where work is being performed, and all places established for the temporary shelter and care of aliens and unemployed persons, and prescribe minimum standards of sanitation for all such labor camps, accommodations, and temporary quarters."

The Department seeks the co-operation of, and wishes to co-operate with, the employers of the State in improving the housing and living conditions of employes. Such improvement is believed to be a good business proposition. Why not apply the principle of production to the housing of employes? Such a policy takes housing out of the realm of welfare work and places it within the field of business. It means greater efficiency in workmanship and in production. It means better satisfied workmen and a more stable labor market.

The recent inquiry of the United States Chamber of Commerce tends to show that the United States must conserve its labor supply to meet a probable shortage after the war. Housing employes well, as a business proposition, will help to stabilize the labor supply of each individual employer.

It will greatly facilitate co-operation between this Department and the employers and employes of the State, if you will fill in the questions on the enclosed blank and return it at your earliest convenience.

[illegible]

Seventy-five answers have been received to July 1st, the most important facts in which have been gathered into the following table:

Report of Railroad Camps to July 1, 1916.—(Reported to the State Employment Bureau, Penn'a.)

	Number Camps	Number Men in Camps	Places in Which the Men are Housed				Tents
			Camp Cars	Bunk Cars	Box Cars	Buildings	
1, ...	294	2,491	8	14	25	72 houses 113 shanties	.....
2, ...	38	926	70	25	.....	.....	.....
8, ...	6	34	3	.....	.....	2 bunk houses 1 house	.....
4, ...	60	500	13	22	.....	37 bunk houses	.....
5, ...	12	580	.....	8	.....	4	.....
6, ...	10	25	7	.....	.....	6	.....
7, ...	2	10	.....	.....	.....	2	.....
8, ...	1	5	.....	.....	.....	1	.....
9, ...	3	26	.....	.....	.....	3	.....
10, .....	.....	.....	13	*	*	*	.....
11, ...	2	11	3	.....	.....	.....	.....
12, ...	19	1,105	165 men in cars	.....	.....	940 men in 65 buildings	.....
13, ...	5	117	No number given All in camp cars	.....	.....	.....	.....
14, ...	6	295	Yes No number given	Yes. No number given	.....	.....	65 men in tents
15, ...	4	97	.....	.....	.....	.....	.....
Total, ...	392	6,222	107	69	25	306	.....

41 railroads have no camps.

14 railroads maintain camps.

55 railroads have reported.
*Number of camps or men not given. Force moving constantly.

It is the purpose of the Department to visit these camps and to report upon the general conditions found therein. Upon the completion of this work, a set of regulations for minimum standards of sanitation will be prescribed. The following suggested regulations which were drawn up after a brief survey of the conditions in Pennsylvania, will serve as a guide in submitting proposed standards to the Industrial Board for approval, after the inspection work has been completed.

Suggested Regulations for Temporary Labor Camps.

COMMONWEALTH OF PENNSYLVANIA,

Department of Labor and Industry, Bureau of Employment.

Minimum standards of sanitation for housing of employes in temporary labor or seasonal labor camps are as follows:

1. Bunk houses must be built at least two feet above the ground to allow free circulation of air under the floor, which must be of lumber or any other suitable material. The ground on which such bunk house is constructed must be level and gradually sloping down from the center to insure drainage of any water which may come through the floor by washing or scrubbing. The place under the floor of bunk house should be screened off by a wire screen to insure against throwing any waste under the floor.
2. The roof and sides of bunk houses must be so constructed as to be water-tight.
3. Ditches must be dug around the sides of the bunk houses and so constructed that water from the roof is carried off.
4. Garbage containers with tight covers in sufficient numbers should be placed around the houses for the collection of garbage. These garbage containers should have their covers on, so that flies may not have access to the contents. Such garbage should be carried off away from camp as often as necessary and burned or buried.
5. The water supply should be sanitary and sufficient and easily obtainable. Provisions should be made for laundry and bathing facilities, if in case, no nearby streams, rivers or lakes are available.
6. The privies must be at least 100 feet from houses, and wells or streams, when water for drinking or cooling purposes is obtained. There should be one privy at least for every 25 employes. Such

privies must be kept sanitary at all times and must not emit any obnoxious odors, for which purpose disinfectants should be used. The roofs of such privies must be water-tight. Each privy must have at least one closely screened window for ventilating purposes and the screen must be so closely woven that no flies can crawl through it. The door of each privy must be kept closed at all times, to prevent flies from coming in.

When women are employed, separate water closets for same must be erected, which must be at least 200 feet distant from men's privies and which must be marked for women only. They must be constructed in same manner as the men's.

7. No bunks or cots in tiers (one above another) are allowed. There must be at least two feet space between the bunks or cots and also two feet of space on the foot end.

No overcrowding is allowed and there should be at least 250 cubic feet of air space for each person occupying such bunk house. The floors and bunks or cots in all houses where employes are housed must be kept clean and free from vermin and the use of one and the same bunk or cot by two persons who may be working on different shifts is very unsanitary and hereby strictly forbidden. The blankets, mattresses, pillows, etc., must be kept clean and sanitary. A sufficient number of cuspidors should be placed in each such house and spitting on floor is forbidden.

8. The contractor or company is responsible for any acts of extortion, frauds, overcharges, unsanitary condition of any commissary store or house in their camp, whether it is maintained by such contractor, company or by the commissary. An itemized list of goods carried by such commissary with prices of each must be posted in a conspicuous place in the store. The company must check up such commissary charges if same are to be deducted from wages and the total amount of such charges from one to another pay day must be placed at least two days before the pay day in the commissary store, so that complaints of overcharges or discrepancies could be made to employer or his duly authorized agent before pay day. It shall be the duty of the superintendent or whoever may be in charge of such camp to make a tour of inspection of the camps and to satisfy himself that same is in a sanitary condition and that all stipulations herein contained are carried out.

Operations of the Employment Bureau offices in Five Cities.—November 1, 1915, to June 1, 1916.

City.	Number of—													
	Persons Asked for by Employers.					Persons Applying for Work.								
	Total.	Nov. & Dec.	Jan.	Feb.	Mar.	April.	May.	Total.	Nov. & Dec.	Jan.	Feb.	Mar.	April.	May.
All cities, ...	16,793	3,247	1,470	1,099	4,170	2,881	3,926	14,460	3,390	2,208	946	2,913	2,373	2,630
Harrisburg, ...	4,863	1,728	535	269	309	426	1,635	1,744	321	207	131	496	192	397
Philadelphia, ...	4,787	1,390	837	777	647	438	698	8,566	2,843	1,896	756	1,111	828	1,132
Johnstown, ...	1,086	1.9	38	53	264	306	216	767	226	1,105	59	99	196	82
Pittsburgh, ...	5,561	.....	.....	.....	2,959	1,488	1,114	3,126	.....	.....	.....	1,207	1,054	865
Altoona, ...	446	.....	.....	.....	.....	213	233	257	.....	.....	.....	.....	103	154

City.	Number of—													
	Persons Referred to Positions.							Positions Filled.*						
	Total.	Nov. & Dec.	Jan.	Feb.	Mar.	April.	May.	Total.	Nov. & Dec.	Jan.	Feb.	Mar.	April.	May.
All cities, ...	6,940	963	820	830	1,539	1,315	1,413	5,234	730	457	570	1,322	1,041	1,114
Harrisburg, ...	1,571	283	179	238	236	286	249	1,230	233	64	228	221	246	238
Philadelphia, ...	2,080	559	579	446	589	366	541	2,638	423	361	311	391	243	309
Johnstown, ...	451	121	62	46	66	55	55	265	74	32	31	42	44	42
Pittsburgh, ...	1,680	.....	.....	.....	708	495	477	1,559	.....	.....	.....	668	455	436
Altoona, ...	158	.....	.....	.....	.....	67	91	142	.....	.....	.....	.....	53	89

*Estimated.

BUREAU OF STATISTICS AND INFORMATION COMPILES ENORMOUS NUMBER OF ACCIDENT REPORTS.

During the first six months of 1916, almost as many fatal accidents occurred in Pennsylvania industries and were reported to the Bureau of Statistics and Information as were reported during the entire twelve months of the preceding year.

Eleven hundred and thirty-six workers were killed during the first six months of this year while the total death list, for the twelve months of 1915 was 1,203. The total of all accidents, fatal and non-fatal, is 121,180 for the first six months of this year as against 61,540 total accidents reported during 1915. Almost seven workers were killed as a daily average during the first six months of this year. The monthly average was 189, while the monthly average of injuries, fatal and non-fatal, was 20,197.

Commissioner Jackson attributes the increase in the number of accidents, reported this year, partly to the operation of the Workmen's Compensation Act bringing in full reports, partly to the greater number of men employed this year and also to the high speed at which work has been conducted with many "green workers."

Commenting on the large casualty list, Commissioner Jackson said: "Two factors can reduce the accident toll fifty to seventy-five per cent. Those factors are carefulness and adequate safeguards. Every employe should exercise the greatest care. Every dangerous machine should be properly safeguarded and every safeguard, installed on a machine, should always be kept in place.

"The Department of Labor and Industry, through its sub-divisions, is actively engaged in efforts to reduce the enormous waste of life and health through industrial mishaps. The Bureau of Inspection has its corps of inspectors in all sections of Pennsylvania insisting that all machinery be made safe. Members of the Industrial Board are working, throughout the State, promoting the safety idea among employes and employers."

"One member of the Board is working exclusively among labor unions, urging the organization of safety committees and another member is pointing out, to employers, the economic and humanitarian benefits of safety committees in every shop.

"An Industrial Accident Prevention Conference, attended by the heads of big corporations, representing \$5,000,000,000 of capital, and labor leaders of more than a million workmen, was held in Harrisburg in March. At that conference, safety problems were thoroughly expounded.

"The Department of Labor and Industry is disseminating safety bulletins and similar publications in the aim to reduce this accident toll which is a tremendous waste of the vital resources of this industrial Commonwealth. The Monthly Bulletin, and similar publications, may be obtained by application to the Department at Harrisburg."

The record of the accidents reported from January 1 to July 1, 1916, as compiled by the Department of Labor and Industry is as follows:

Accidents Reported from January 1, to July 1, 1916

Month..	Fatal.	Total.	Daily Average.
January, ...	129	13,465	518
February, ...	222	24,475	979
March, ...	239	26,971	999
April, ...	169	18,010	720
May, ...	195	18,320	708
June, ...	182	19,939	767
Totals, ...	1,136	121,180	782
Monthly average, ...	189	20,197	.....

Manufacturers Must Make Production Reports.

As a number of manufacturers have delayed submitting their production reports for the year 1915, to the Department of Labor and Industry, a warning has been issued that unless the data is submitted the matter will be referred to the Attorney General. The letter sent, from the Department, to employers who have neglected to send in their reports is as follows:

Upon an examination of our files we find that you have failed to make a report of your business for the year 1915.

The Act of Assembly of June 2, 1913, creating this Department, makes it mandatory upon industrial concerns to make such a report.

Blank forms for making report were mailed you early in January, and one letter has been sent you requesting you to comply with the law in this matter.

It is mandatory upon the Commissioner of Labor and Industry to collect and compile statistics of industries of Pennsylvania, and I do trust that it will not be necessary to resort to the powers vested in me by the Legislature to compel you to make such a report.

Unless your report is received within fifteen days, or a satisfactory explanation made as to why such report has not been filed, the matter will be reported to the department of justice.

I trust that I may have your co-operation in carrying out the purpose of the Legislature in this matter and hope that it will not be necessary to resort to legal process to obtain the report.

If your report has been made under some other firm name, or as subsidiary to some other company, kindly so advise in order that we may correct our files.

Instructions on Accident Reports.

Employers throughout the State have been notified, by the Bureau of Statistics and Information, of the necessity of reporting accidents resulting in injuries to employes. The Act of Assembly, approved June 19, 1913, provides:

"That within thirty days after the beginning of the disability of an employe because of any personal injury, caused by an accident occurring in the course of his employment, the employer, whether a person, firm, or corporation, shall make report of such accident to the Department of Labor and Industry," and

"Any person, firm, or corporation * * * * * who shall fail to make report as aforesaid, shall be liable to the Commonwealth for a penalty of one hundred dollars to be recovered by action brought by said Department."

In an effort to eliminate confusion in the submission of accident reports the following letter has been sent to employers from the Bureau of Statistics:

Considerable annoyance has been caused both to yourselves and this Bureau by confusion which can be obviated.

This confusion arises from the fact that many accidents are reported under one name, and when a supplemental report is sent in, it is under a different name, and when the agreement is filed, it may be under a third name, or under the name used in the supplemental report.

If you find that there is any difference between the name used in the original accident report and the one used in the supplemental report and the agreement, you can aid our work materially and prevent our making unnecessary requests upon you, by calling attention to the name under which the accident was originally reported.

In addition to this, if every question that is possible to answer, both on the original report and especially on the supplemental report, was answered, it would obviate the necessity for making frequent requests for duplicate supplemental reports. The supplemental reports should be made in all cases where an accident is reported to this Bureau. This should be made irrespective of the amount of time lost.

In computing the time lost in the supplemental report, kindly give the actual number of days or weeks the employe was unable to work,—not the number of compensation days or weeks.

Cause, Effect and Degree of Accidents Reported in 1915, by Occupation.

Occupation.	Cause.									
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.
Actors, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Awning, flag and bunting workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Apprentices, ...	225	36	82	38	257	.....	10	41	.....	67
Baggage masters, ...	4	.....	16	7	12	3	.....	1	1	1
Bakers, ...	13	3	.....	.....	1	.....	.....	2	.....	2
Barbers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bartenders, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Blacksmiths, ...	81	48	47	23	174	3	.....	19	.....	52
Boiler-makers, ...	111	25	61	59	236	9	.....	23	.....	81
Bolt, nut and rivet workers, ...	73	19	28	27	80	4	.....	9	.....	33
Bookbinders, ...	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bottlers, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brakemen, ...	13	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brass and copper workers, .....	.....	15	32	35	40	253	6	27	.....	33
Brewery workers, ...	1	.....	2	.....	4	.....	.....	.....	.....	.....
Brick-layers, ...	7	.....	.....	8	20	1	.....	4	.....	.....
Brick-makers, ...	15	.....	.....	.....	3	.....	.....	1	.....	8
Broom makers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brush makers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Butchers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Button factory workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Caisson and tunnel workers, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Candy makers, ...	9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canners and preservers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carpenters, ...	130	.....	.....	142	315	31	33	84	.....	61
Carters, ...	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cement workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[illegible]

Cause, Effect and Degree of Accidents Reported in 1915, by Occupation—Continued.

Occupation.	Cause.									
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.
Jewelry workers, ...	10	.....	.....	.....	.....	.....	.....	.....	.....	1
Knitters, ...	506	492	1,676	540	2,245	718	110	358	.....	527
Laborers—Skilled, ...	1,182	562	2,124	1,071	4,393	983	235	449	2	860
Laborers—Unskilled, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Letter carriers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lime burners, ...	1	.....	.....	2	.....	.....	.....	.....	.....	1
Linemen, ...	13	28	35	71	55	6	1	12	.....	13
Loom fixers, ...	3	.....	2	3	2	.....	.....	.....	.....	.....
Longshoremen, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Linotype operators, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Machinists, ...	684	110	436	191	382	.....	43	155	.....	249
Machine runners, ...	778	72	137	64	448	34	16	77	.....	115
Machine scrapers, ...	16	2	13	5	21	13	.....	3	.....	6
Mail agents, .....	.....	.....	.....	2	3	.....	.....	.....	.....	.....
Masons, ...	3	3	16	4	10	3	2	4	.....	5
Match workers, ...	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Mattress workers, ...	1	.....	1	1	1	.....	1	1	.....	1
Millers, ...	5	5	1	.....	1	.....	.....	.....	.....	.....
Milliners, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miners, ...	137	50	2,893	249	1,127	270	28	126	.....	401
Motormen, ...	15	16	17	11	28	51	5	7	.....	3
Moulders, ...	39	292	42	20	105	2	12	14	.....	13
Moving picture operators, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nail workers, ...	1	2	.....	1	3	.....	.....	1	.....	1
Non-alcoholic drink workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nursesmen, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oil cloth and window shade workers, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Oil well workers, .....	.....	.....	.....	2	.....	.....	.....	.....	.....	1

Operators, ...	271	31	43	56	146	8	5	34	.....	46
Optical goods workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Paint and varnish workers, ...	5	1	28	69	54	11	6	11	.....	16
Painters and paper hangers, ...	17	9	3	4	6	.....	.....	1	.....	.....
Paper and pulp mill workers, ...	14	1	30	1	1	.....	1	1	.....	3
Paper box makers, ...	39	1	6	1	11	.....	.....	6	.....	.....
Pattern makers, ...	6	3	.....	2	3	.....	.....	.....	.....	.....
Rope mill workers, ...	11	1	.....	.....	.....	1	.....	.....	.....	1
Planing mill workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Plumbers, gas and steam fitters, ...	3	4	6	10	11	1	1	4	.....	4
Police men, ...	4	1	4	21	4	4	2	6	.....	4
Polishers and grinders, ...	132	7	34	10	68	1	.....	31	.....	22
Pottery workers, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Powder mill workers, .....	.....	7	.....	.....	.....	.....	4	12	.....	9
Pressmen, ...	149	13	44	8	77	.....	.....	.....	.....	.....
Professional instrument workers, ...	2	.....	.....	26	2	.....	3	29	.....	20
Puddlers and heaters, ...	28	54	32	9	57	3	1	.....	.....	8
Pumpmen, ...	9	4	8	15	6	.....	.....	1	.....	26
Quarymen, ...	14	70	70	15	70	27	.....	2	.....	58
Rolling mill workers, ...	139	31	57	53	206	1	3	63	.....	.....
Rope, cordage and hemp mill workers, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	1
Roofters, ...	2	4	4	5	3	.....	.....	.....	.....	1
Rubber factory workers, ...	4	6	6	2	6	.....	.....	.....	.....	.....
Riggers, ...	38	29	64	85	184	13	15	13	.....	39
Sawyers, ...	59	2	11	3	24	.....	.....	2	.....	8
Servants, ...	3	4	1	10	5	3	.....	2	.....	.....
Servers, .....	.....	2	.....	.....	.....	.....	2	.....	.....	17
Shearmen, ...	85	7	37	17	102	1	.....	28	.....	.....
Shoe factory workers, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shoemakers, ...	1	.....	.....	.....	427	21	12	70	.....	84
Shopmen, ...	112	85	133	124	3	1	.....	.....	.....	6
Slaters, ...	5	1	13	16	8	6	2	5	.....	.....
Slate pickers, ...	1	.....	.....	2	1	.....	.....	1	.....	.....
Slate workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smelters, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Soap makers, ...	1	1	.....	6	2	.....	1	1	.....	2
Spinners, ...	23	1	.....	.....	.....	.....	13	19	.....	28
Station employees, ...	58	4	61	75	264	13	.....	.....	.....	.....
Stereotypers, .....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
Stone cutters, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Straw workers, .....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Sugar makers, ...	15	2	22	15	41	.....	3	3	.....	16
Structural iron workers, .....	.....	.....	.....	1	.....	.....	1	.....	.....	1
Tailors, ...	1	4	.....	7	11	.....	.....	1	.....	1
Tanners, ...	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Teachers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Theatre employees, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tile and terra cotta workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Timers, ...	14	25	9	16	42	1	2	9	.....	.....
Tobacco workers, .....	.....	.....	.....	.....	1	.....	.....	.....	.....	33
Trackmen, ...	7	2	36	28	144	49	5	13	.....	.....

Cause, Effect and Degree of Accidents Reported in 1915, by Occupation—Continued.

Occupation.	Effect.						Degree.			
	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Fatal.	Totals.
Actors, ...	1	236	289	1	1	1	10	85	3	1
Awning, flag and bunting workers, ...	54	16	3	11	1	3	1	1	1	706
Apprentices, ...	4	5	7	3	1	1	1	1	1	25
Baggage masters, ...	4	5	7	3	1	1	1	1	1	12
Bakers, ...	4	5	7	3	1	1	1	1	1	21
Barbers, ...	4	5	7	3	1	1	1	1	1	21
Barrenders, ...	59	161	115	78	3	2	4	28	1	404
Blacksmiths, ...	27	225	173	93	2	1	6	51	3	612
Boiler-makers, ...	34	79	102	38	1	1	2	13	1	293
Bolt, nut and rivet workers, ...	1	1	2	2	1	1	1	1	1	5
Book-binders, ...	1	1	2	2	1	1	1	1	1	5
Bottlers, ...	1	1	2	2	1	1	1	1	1	6
Brakemen, ...	19	212	91	110	1	1	2	22	15	349
Brass and copper workers, ...	1	1	2	3	1	1	1	2	1	6
Brewery workers, ...	2	3	2	1	1	1	1	1	1	9
Brick-layers, ...	7	29	18	14	1	2	1	6	1	70
Brick-makers, ...	2	6	6	2	1	1	1	1	1	14
Broom makers, ...	1	1	1	1	1	1	1	1	1	1
Brush makers, ...	1	1	12	1	1	1	1	5	1	17
Butchers, ...	1	1	1	1	1	1	1	1	1	21
Button factory workers, ...	1	1	1	1	1	1	1	1	1	1
Caisson and tunnel workers, ...	3	5	4	1	1	1	1	4	1	12
Candy makers, ...	1	1	7	1	1	1	1	1	1	18
Canners and preservers, ...	22	275	300	203	3	4	19	57	17	903
Carpenters, ...	1	6	5	1	1	1	1	1	1	13
Carders, ...	1	6	5	1	1	1	1	1	1	13

Cause, Effect and Degree of Accidents Reported in 1915, by Occupation—Continued.

Occupation.	Effect.						Degree.					
	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Fatal.	Serious.	Minor.	Totals.
Cement workers.	4	13	10	7	.....	.....	.....	4	1	4	33	38
Chain makers.	1	6	5	1	.....	.....	.....	.....	.....	1	12	13
Chaufeurs. ....	.....	12	8	9	.....	.....	1	4	.....	6	28	34
Chemical workers.	22	7	5	3	.....	.....	.....	7	2	5	38	45
Chippers.	21	163	146	53	1	6	4	57	.....	29	422	451
Cigar makers. ....	.....	.....	1	1	.....	.....	1	.....	.....	.....	3	3
Cigarette makers. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Clerks.	5	68	32	51	.....	4	5	6	3	28	140	171
Coke workers.	17	58	34	26	.....	2	.....	17	1	22	142	165
Core workers.	5	32	31	16	.....	.....	2	1	.....	7	80	87
Cork workers. ....	.....	1	5	1	.....	.....	.....	1	.....	.....	1	1
Compositors. ....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Conductors—Electric railway. ....	.....	3	.....	.....	.....	.....	.....	2	.....	1	7	7
Conductors—Steam railway.	3	31	13	25	.....	.....	.....	1	3	8	62	73
Coopers. ....	.....	8	5	5	.....	.....	.....	.....	.....	.....	19	19
Cranemen.	46	82	73	101	2	.....	1	25	5	45	280	330
Creamery workers. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cutlers.	13	63	50	26	.....	1	.....	9	1	20	141	162
Cutters. ....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	3	3
Car repairmen.	83	1,046	991	613	3	6	29	263	5	306	3,323	3,634
Distillers. ....	.....	6	2	4	.....	.....	.....	1	.....	.....	13	13
Drivers.	14	575	237	278	4	.....	9	58	44	186	945	1,175
Dyers, bleachers and finishers.	8	.....	2	2	.....	.....	.....	.....	.....	.....	19	20
Electrotypers.	2	3	2	2	.....	.....	.....	.....	.....	.....	17	17
Engineers—Locomotive.	8	31	13	23	1	.....	2	10	.....	15	75	90
Engineers—Stationary.	39	71	54	56	.....	1	2	19	14	50	179	243
Engravers. ....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1
Express messengers. ....	.....	2	1	1	.....	.....	.....	.....	.....	1	3	4

Sawyers, ...	3	25	62	7	1	.....	.....	6	.....	17	87	104
Servants, ...	4	12	5	6	.....	.....	.....	.....	.....	3	24	28
Servants, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2
Shearers, ...	16	83	148	29	.....	.....	.....	15	.....	23	272	296
Shoe factory workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Shoemakers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Shoemakers, ...	97	470	250	189	.....	.....	.....	62	.....	112	960	1,073
Shopmen, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Slaters, .....	.....	15	16	1	.....	.....	.....	2	.....	12	48	60
Slate pickers, .....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....	5
Slate workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Smelters, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Soap makers, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Spinners, ...	1	9	15	5	.....	.....	.....	3	.....	8	28	36
Station employees, ...	5	296	101	117	.....	.....	.....	13	.....	51	483	534
Stereotypers, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Stone cutters, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Straw workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sugar makers, ...	3	33	30	1	.....	.....	.....	10	.....	17	96	117
Structural iron workers, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Tailors, ...	3	14	20	5	.....	.....	.....	2	.....	2	42	44
Tanners, .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Teachers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Theatre employees, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tie and terra cotta workers, ...	25	27	37	23	.....	.....	.....	7	.....	.....	114	122
Tinners, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco workers, ...	5	147	81	64	.....	.....	.....	18	.....	39	273	317
Trackmen, ...	3	11	11	2	.....	.....	.....	5	.....	4	28	32
Turners, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Umbrella and parasol workers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Undertakers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upholsterers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Upholsterers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wagon makers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watch and clock makers, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weavers, ...	1	32	24	14	.....	.....	.....	7	.....	9	79	88
Wire Workers, ...	12	56	70	26	.....	.....	.....	36	.....	25	186	211
Warehousemen, .....	.....	129	16	63	.....	.....	.....	1	.....	27	188	215
Yardmen, ...	4	16	13	18	.....	.....	.....	1	.....	11	40	52
All others, ...	594	2,357	1,659	1,089	24	.....	.....	380	203	768	5,143	6,114
Grand total, ...	4,502	23,007	17,856	10,973	105	.....	.....	4,168	1,203	7,274	53,063	61,540
Fatal, ...	111	561	67	326	.....	.....	.....	178	.....	.....	.....	.....
Serious, ...	565	1,920	1,616	2,766	51	.....	.....	347	.....	.....	.....	.....
Minor, ...	3,886	20,526	16,173	7,881	54	.....	.....	3,693	.....	.....	.....	.....

**PAVING STATISTICS OF TWENTY-SEVEN PENNSYLVANIA
BOROUGHES OF MORE THAN 8,000 POPULATION COM-
PILED BY DIVISION OF MUNICIPAL STATISTICS AND
INFORMATION.**

Twenty-seven Pennsylvania boroughs of more than eight thousand population, have an aggregate of 267.4 miles of paved streets. Of this total mileage, 249.57 miles are of brick; 6.9 miles, asphalt and asphaltic macadam; 5.93 miles, amiesite and five miles wood block. That data has been compiled by the Division of Municipal Statistics and Information of the Department of Labor and Industry.

Wide variation exists in the number of miles of streets paved in the different boroughs. The borough of Butler, with a population of 20,728, leads the list with 35 miles of paved highways; Washington, population 18,778, is second with 32 miles of paving and Wilkinsburg, with a population of 18,924, is third with 27.63 miles of paved streets. The data shows that the boroughs in the western section of the State stand well at the head of the list in paving. Greensburg, with a population of 13,012, has 21.46 miles of paving. Norristown, the largest borough, population 27,875, has 14.22 miles of paving while Shenandoah, with a population of 25,774, has but 1.9 miles of paving.

The complete compilation of the paving data is given in the accompanying table:

Paving Statistics, Boroughs of over 8,000 Population.

	Bethlehem, A. M. Gawley, Borough Engineer. Population 12,837.	Butler, H. O. Carson, Borough En- gineer. Population 20,728.	Carlisle, J. C. Hitesbaw, Borough Engineer. Population 10,303.	Carnegie, O. B. Higley, Borough En- gineer. Population 10,009.	Chambersburg, J. H. Atherton, Borough Engineer. Population 11,800.	Columbia, G. A. Hogenogler, Bor- ough Engineer. Population 11,454.	Farrell, J. F. Thomas, Borough Engineer. Population 10,190.
Miles of paved street, ...	1.13	35	2	11	1	5	3.54
Square yards of paving, ...	32,000	616,000	42,034	135,500	20,000	100,000	62,304
Principal kind of pavement in use, ...	Amiesite.	Brick.	Brick.	Brick.	Brick on concrete.	Asphaltic macadam.	Brick block.
Is the entire cost of paving assessed against the abut- ting property?	No.	No.	No.	No.	No.	No.	No.
What proportion is paid by the borough?	33 1/3%	33 1/3%	33 1/3%	33 1/3%	33 1/3%	33 1/3%	33 1/3%
Under what rule is assess- ment made?	Foot front.	Foot front.	Foot front.	Foot front.	Foot front.	Foot front.	Foot front.
Last price of sheet asphalt per square yard, ...	—	1.05	1.87	Slag bed with brick 1.55 Concrete bed with brick 2.10	Concrete base 1.85	—	—
Last price of brick per square yard, ...	—	Including con- crete base & grout filler.	Including con- crete base.	—	2.19 Including con- crete base.	1.63 Sand base.	Borough does own work. 1.56

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	Bethlehem, Population 12,837. Engineer, A. M. Cawley, Borough	Butler, Population 20,728. Engineer, H. O. Carson, Borough	Carlisle, Population 10,303. Engineer, J. C. Hitesbew, Borough	Carnegie, Population 10,009. Engineer, O. B. Hitley, Borough	Chambersburg, Population 11,800. Engineer, J. H. Alberton, Borough	Columbia, Population 11,454. Engineer, C. A. Hogenlogler, Borough	Farrell, Population 10,190. Engineer, J. F. Thomas, Borough
Last price of bluestone curbing per linear foot.	—	—	—	.70	—	—	.54
Last price of granite curbing per linear foot, ...	—	—	—	—	1.09	—	—
Last price of granolithic curbing per linear foot, ...	.80	.60	.40	—	.47	.40	—
Last price of steel bound granolithic curbing per linear foot.	—	.75	.53	—	.62	.55	—
Is the entire cost of curbing assessed against the abutting property?	Yes.	No.	Yes.	No.	No.	Yes except when with paving.	Yes.
What proportion is paid by the borough?	—	33½%	—	33½%	33½%	With paving 33½%	—
Is the entire cost of resetting curbing charged against the abutting property?	Yes.	No.	Yes.	No.	Yes.	No.	Yes.
What proportion is paid by the borough?	—	33½%	—	Entire cost.	—	Entire cost.	—

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	Greensburg. Population 13,012. J. J. Neel, Borough Engineer.	Homestead. Population 18,713. C. H. Van Horn, Borough Engineer.	Lansford. Population 8,321. Lehigh Coal and Navigation Co., Borough Engineer.	McKees Rocks. Population 14,702. G. H. McGinness, Borough Engineer.	Mount Carmel. Population 17,532. W. W. Robertson, Borough Engineer.	Nanticoke. Population 18,877. D. H. Samuel, Borough Engineer.	New Brighton. Population 8,329. H. T. Barker, Borough Engineer.
Miles of paved street, ...	21.46	16.37	2.49	11.94	3.14	4.66	9
Square yards of paving, ...		292,809	58,555	181,821	75,847	66,000	200,000
Principal kind of pavement use.	Vitrified brick & block.	Brick.	Brick block.	Brick on gravel base.	Brick.	Brick.	Brick.
Is the entire cost of paving assessed against the abutting property?	No.	No, except in case of alleys.	No.	No, except in case of alleys.	No.	No.	No.
What proportion is paid by the borough?	33⅓%	33⅓%, except in case of alleys.	33⅓%	33⅓% to 50%	33⅓%	33⅓%	33⅓%
Under what rule is assessment made?	Foot front.	Foot front & benefits.	Foot front.	Foot front & benefits, viewers fixing damages.	Foot front.	Foot front.	Foot front.
Last price of sheet asphalt per square yard, ...							
Last price of brick per square yard.	1.39	1.99	2.51	1.78 to 1.95 on 6" concrete, grout filler.	2.28	2.32	1.67
Last price of bluestone curbing per linear foot.	Sandstone. .57	.63	Conglomerate. .65	Beaver Valley sandstone. .78	.92	.59	

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	Greensburg, Population 13,012. J. J. Neel, Borough Engineer.	Homestead, Population 18,713. C. H. Van Horn, Borough Engineer.	Lansford, Population 8,321. Lehigh Coal and Navigation Co., Borough Engineer.	McKees Rocks, Population 14,702. G. H. McGinness, Borough Engineer.	Mount Carmel, Population 17,532. W. W. Robertson, Borough Engineer.	Nanticoke, Population 18,877. D. H. Samuel, Borough Engineer.	New Brighton, Population 8,329. H. T. Barker, Borough Engineer.
Last price of granite curbing per linear foot.	—	—	Concrete. .65	Cement concrete curbing & gutter. .87	—	—	—
Last price of granolithic curbing per linear foot.	—	—	—	Cement concrete curbing & gutter. .87	—	—	.55
Last price of steel bound granolithic curbing per linear foot.	—	—	—	Cement concrete. .70	—	.55	.67
Is the entire cost of curbing assessed against the abutting property?	No.	No.	Yes.	No.	Yes.	No.	Yes.
What proportion is paid by the borough?	33%	Entire cost.	—	33% to 50%.	—	33%	—
Is the entire cost of resetting curbing charged against the abutting property?	Yes.	No.	No.	No.	Yes.	No.	No.
What proportion is paid by the borough?	—	Entire cost.	Entire cost.	Entire cost.	—	Entire cost.	33%

Miles of paved street, ...	14.22	Norristown, S. O. Corson, Borough Engineer. Population 27,875.	17	North Braddock, G. F. Stefers, Borough Engineer. Population 11,824.	Olyphant, W. A. Taylor, Borough Engineer. Population 8,505.	Philmixville, A. Y. Hesse, Borough Engineer. Population 10,743.	Punxsutawney, R. S. Van Rensselaer, Borough Engineer. Population 19,588.	Shamokin, S. E. May, Borough Engineer. Population 25,774.	Shenandoah, D. T. Glover, Borough Engineer. Population 38,800.
Square yards of paving, ...	258,615		250,000		73,920	92,370	100,407	8	1.9
Principal kind of pavement in use, ...	Vitrified brick.	Brick.	Brick.	Brick.	Brick.	Vitrified brick.	Brick.	Brick.	Asphalt.
Is the entire cost of paving assessed against the abutting property?	No.	No.	No.	No.	No.	No.	No.	No.	No.
What proportion is paid by the borough?	Entire cost.		33 1/3%	33 1/3%	33 1/3%	Entire cost.	33 1/3%	33 1/3%	Entire cost.
Under what rule is assessment made?	—	Foot front.	Foot front.	Foot front.	Foot front.	—	Foot front.	Foot front.	—
Last price of sheet asphalt per square yard, ...	—	—	—	—	—	—	—	2.44	1.95
Last price of brick per square yard, ...	2.03	1.77	2.38	1.98	1.71	2.03	1.71	2.03	2.30
Last price of bluestone curbing per linear foot, ...	.70	—	.75	—	—	—	—	.67	—
Last price of granite curbing per linear foot, ...	1.25	—	—	—	—	—	—	—	—

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	Norristown, Population 27,875. S. C. Corson, Engineer. Borough	North Braddock, Population 11,824. G. F. Sifers, Engineer. Borough	Olyphant, Population 8,505. W. A. Taylor, Engineer. Borough	Phoenixville, Population 10,743. A. Y. Hesse, Borough En- gineer.	Punxsutawney, Population 9,038. R. S. Van Rensselaer, Bor- ough Engineer.	Shamokin, Population 19,588. S. R. May, Borough En- gineer.	Shenandoah, Population 25,774. D. T. Glover, Borough Engineer.
Last price of granolithic curb- ing per linear foot.	—	.62	—	.55 Including gutter.	.45	—	—
Last price of steel bound granolithic curbing per lin- ear foot.	.60	—	.69	—	—	—	—
Is the entire cost of curbing assessed against the abut- ting property?	No.	No.	No.	Yes.	No.	Yes.	Yes.
What proportion is paid by the borough?	10' r. corners of concrete at \$9 per cor.	33%	33%	—	33%	—	—
Is the entire cost of resetting curbing charged against the abutting property?	No.	No.	No.	Yes.	No.	Yes.	Yes.
What proportion is paid by the borough?	Corners (10' r.).	33%	33%	—	Entire cost.	—	—

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	South Bethlehem, Population 19,973. R. M. Brady, Borough En- gineer.	Steelton, Population 14,246. W. P. Callaghan, Borough Engineer.	Sunbury, Population 13,770. G. F. Keeler, Borough En- gineer.	Warren, Population 11,080. A. Rogers, Borough En- gineer.	Washington, Population 18,778. D. C. Morrow, Borough Engineer.	Wilkinsburg, Population 18,924. Freese & Sperling, Bor- ough Engineers.
Miles of paved street, ...	4.8	6	6	9.3	32	27.63
Square yards of paving, ...	104,460	88,900	100,000	—	525,650	416,544
Principal kind of pavement in use, ...	Amiesite.	Wood block.	Brick.	Brick.	Brick.	Brick.
Is the entire cost of paving assessed against the abutting property?	No.	No.	No.	No.	No.	No.
What proportion is paid by the borough, ?	Entire cost.	33 1/3%	33 1/3%	33 1/3%	Entire cost.	33 1/3%
Under what rule is assessment made?	—	Foot front.	Foot front.	Foot front.	—	Foot front.
Last price of sheet asphalt per square yard.	Amiesite. 1.59	2.04	—	—	—	—
Last price of brick per square yard, ...	—	—	1.97 and 2.14 Asphalt filler.	2.75	1.55	2.00
Last price of bluestone curbing per linear foot, ..	.75	—	.75	Ohio sandstone. .60.	.57	—
Last price of granite curbing per linear foot, ...	—	—	—	—	—	—

Paving Statistics, Boroughs of over 8,000 Population—Continued.

	South Bethlehem, Population 19,973. R. M. Brady, Borough En- gineer.	Steelton, Population 14,246. W. P. Callaghan, Borough Engineer.	Sunbury, Population 13,770. G. P. Keeler, Borough Engineer.	Warren, Population 11,080. A. Rogers, Borough En- gineer.	Washington, Population 18,778. D. C. Morrow, Borough Engineer.	Wilkinsburg, Population 18,924. Freese & Sperling, Bor- ough Engineers.
Last price of granolithic curbing per linear foot,	—	.42	.57 & .60	Concrete. .35	.43	—
Last price of steel bound granolithic curbing per linear foot.	—	.35	.65	—	—	.73
Is the entire cost of curbing assessed against the abutting property?	Yes.	No.	No.	No.	Yes.	No.
What proportion is paid by the borough?	—	33 1/3%	33 1/3%	33 1/3%	—	33 1/3%
Is the entire cost of resetting curbing charged against the abutting property?	Yes.	No.	Yes.	No.	Yes.	No.
What proportion is paid by the borough?	—	Entire cost.	—	33 1/3%	—	Entire cost.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



A BULLETIN OF INFORMATION FOR THE PUBLIC

SEPTEMBER, 1916.

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IN

WORKMEN'S COMPENSATION?

ACCIDENT PREVENTION?

FIRST AID METHODS?

OCCUPATIONAL DISEASES?

PROBLEMS OF EMPLOYMENT AND UNEMPLOYMENT?

AVOIDANCE AND SETTLEMENT OF LABOR DISAGREEMENTS?

AMERICANIZATION OF ALIEN WORKERS?

FIRE PREVENTION IN THE FACTORY AND PUBLIC HALL?

STATE LAWS AND REGULATIONS AFFECTING EMPLOYER AND EMPLOYEE?

IF YOU ARE

HEAR THESE SUBJECTS DISCUSSED AT

THE FOURTH ANNUAL

WELFARE AND EFFICIENCY CONFERENCE

November 21, 22 and 23

STATE CAPITOL, HARRISBURG

UNDER AUSPICES OF

PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY

JOHN PRICE JACKSON, Commissioner

ENGINEERS' SOCIETY OF PENNSYLVANIA,
CO-OPERATING

Write for Program
(4)



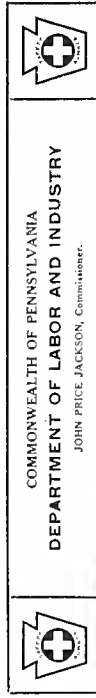
Accident Reports Received for Six Months

Show:—

- Over 1,000 persons killed.
- Over 125,000 persons injured.
- Over \$1,000,000 lost in wages by injured.

50 per cent of this enormous loss could be prevented.

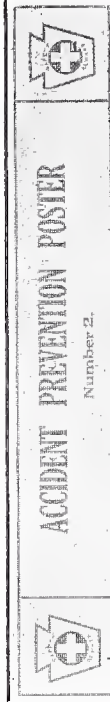
**Do your work in a safe way.
Is it not worth while?**



COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF LABOR AND INDUSTRY

JOHN PRICE JACKSON, Commissioner.



Lost an Arm While Adjusting Moving Machinery



(Copyright of American Locomotive Co.)

DO NOT OIL, REPAIR OR ADJUST MOVING MACHINERY.
SOONER OR LATER YOU ARE BOUND TO SUFFER FOR SUCH CARELESSNESS.

WHY TAKE CHANCES WHEN INJURY IS SURE TO RESULT?



COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF LABOR AND INDUSTRY

JOHN PRICE JACKSON, Commissioner.

OBTAIN THESE SAFETY POSTERS FOR THE BULLETIN BOARDS OF YOUR PLANT

They are the first two Accident Prevention Posters of a series to be issued free to industrial establishments in Pennsylvania by the Department of Labor and Industry, Harrisburg. If you have not received copies of these first two posters, for your bulletin boards, a request will bring them. Each poster is 8½ by 11 inches. They are distributed to carry a plea for carefulness direct to the workers in Pennsylvania's industrial plants. See page 12.

OUTLINE OF ADDRESS BY JOHN PRICE JACKSON, COM-
MISSIONER OF LABOR AND INDUSTRY, BEFORE THE
PENNSYLVANIA FEDERATION OF LABOR AT BEAVER
FALLS, ON TUESDAY, MAY 9, 1916.

Corporations represent, in effect, the pooling of the savings of hundreds or tens of thousands of men in order that the great powers and possibilities of large amounts of capital may be put to work economically and profitably, and thus to the advantage of each investor. This is to the economic advantage of the country. Likewise employes organize and pool their labor resources in order that they may thereby have more power to obtain for their services an acceptable return. Just as we have accepted as necessary and right the pooling of the savings of many individuals, so we should accept as just the organization or pooling of the labor resources of laboring men. Such organization, whether of capital or labor, should be under such governmental supervision as will protect the interests of all, including the public, and not permit its misuse by the unscrupulous. The meeting which I am addressing, is, as I understand it, composed of the delegates from labor organizations representing the various trades of the State. I understand it is not to confine its interests purely to matters of wages, hours of labor and conditions of labor, but to all subjects which relate to the welfare of the working people and of the industries themselves. With this view of the breadth of purpose of your organization, I deem it fitting that I should outline to you as a representative of the Department of Labor and Industry of the State, the important legislative enactment relating to, and the activities of that Department which have been put into effect since I met with you at your last annual meeting. I also deem it proper to make suggestions as to how you can best make use of this Department for the purpose of advancing the welfare of the people of our Commonwealth.

Important Legislative Enactment.

Your present Governor, Martin G. Brumbaugh, was elected upon a platform largely devoted to methods of improving conditions of labor and industry. The following named legislation not only was earnestly and without fear supported and advocated by him, but was in most instances drawn under his direct supervision. A very large amount of credit should therefore be given to him for the good which has been accomplished.

Probably the most vital legislation passed at this session were Acts Nos. 329 and 330, providing for the health and safety in anthracite and bituminous coal mines. We have had in Pennsylvania, for a quarter of a century or so, legislation which deprived those injured in the coal mines, or their widows and orphans, the ordinary rights to appeal to our State courts for compensation. This legislation can be described by no other word than barbarous, and it is surprising that it should remain upon our statute books for such a length of time. Thousands of widows and orphans, are today living in our Commonwealth without having been accorded the help that should have been given them through this inhuman and unjust legislation. The bills referred to removed the bars thus put up in the face of our miners and bring the employes of our mines under the working of our accident compensation laws on the same basis as are those of any other industry. I am happy to say that from personal information I am sure that the great bulk of our mine operators are glad to have had the inhuman laws of the past wiped out.

Acts 338 and 339 are those organizing a humane and business-like system of accident compensation under the Department of Labor and Industry for those workers injured in the Commonwealth of Pennsylvania. These Acts are so well known to you that I need not comment thereon.

Act 340, creating a State Insurance Fund, is the proper correlative to the Compensation Act, and makes an implement whereby the State can see to it that compensation rates for accident insurance may be kept at a reasonable scale, and not through misuse become an unnecessary heavy burden upon our industries or workers.

Act 177—The Child Labor Law, was particularly needed. Previous legislation had excluded children under fourteen years of age from the industries, but had not properly safeguarded their minds and bodies in the age of puberty, or above fourteen; nor was it of a character to be fully enforceable. Under the new act, the child between fourteen and sixteen is at all times either under the supervision of his school-master or his employer. In order to get employment he must now have a certificate from a physician, showing that he can enter the employment contemplated without physical injury, or the chance of his becoming stunted or ill-developed for life. He must now, also, while in employment enter a continuation school a portion of his time. The continuation school is a marked example to the Nation of what can be done to aid the individual child to an intelligence and skill, which will make him of greater value to himself and family as a producer; these schools will result in raising

the average capacity of the workers of Pennsylvania to a higher plane, and will make this Commonwealth even more the industrial leader of the Nation than it has been in the past. Such a result means, not only prosperity to the State, but to each individual worker who through additional skill is enabled to command a larger income.

Act 327, amending the Woman's Law, has given the Industrial Board of the Department of Labor and Industry, the power to apply the provisions of that beneficent law in a way which will be to the better advantage of the women and those employing them. The action of the Governor in vetoing much pernicious legislation intended to strip the Woman's Law of many of its most useful features for protecting women in their physical capacity to produce strong children, is especially to be commended.

The Mattress Act, No. 219, is a rewriting of the Mattress Act passed at a previous session, intended to prevent the transmission of contagious diseases through the careless distribution of improper mattresses, as the former Act was impotent through faulty construction. These faults have been removed and the act now on the books is a very useful one for the protection of the health of our people.

Least known to the public, but probably second only in their value to the Mining Act, first referred to, are Acts Nos. 373 and 397, providing for the establishment of public employment offices, the regulation of private employment offices, and the provisions giving the Bureau of Employment of the Department of Labor and Industry the right to investigate and right many classes of wrongs perpetrated upon workers. There is much unnecessary waste in our present methods of employment which, in the final analysis means lower wages and longer hours for the workers. This results through our failure to act quickly in a business-like manner, in connecting the workmen who want work, with the man who has a position to offer. These laws are the beginning of a system whereby a local employment agency will be established in every industrial community. These local public agencies will be given State aid, and will be tied up to the State in such a manner that they will act as supervising central agencies, and as transfer points for labor passing from one community to another as needed. The arrangement is made in such a way that the State may be so related to the United States government that the latter may become a transfer station for moving labor from one State to another. These laws give power for aiding in lessening the ills arising from seasonal occupation, and for the elimination of the exploitation of foreigners, or their workmen who are not in a position to protect themselves.

Act No. 88, enlarging the facilities of the Department of Labor and Industry was essential to the performance of the great work required by that Department in behalf of the workers and the industries. There are many other equally beneficent laws which affect you more or less directly as the representatives of labor but I have confined myself to those which relate to the State work with which I am connected. This body of new laws taken all together places Pennsylvania well in the van of the most enlightened States of this country and the world. The result is all the more remarkable because heretofore Pennsylvania has been a serious laggard with regard to many phases of industrial legislation and the protection of her people.

Activities of the Department of Labor and Industry.

Under the laws referred to, particularly the one enlarging the Department of Labor and Industry, it has been possible to systematize and perfect machinery of that Department in such a way as to become of much larger service to the Commonwealth than in the two earlier years of its life. I will outline very briefly some of the activities entered upon.

The Compensation System gives all workers injured, except those in domestic service and farming, free medical service, and after two weeks, weekly compensation, and has been put into force throughout the State with but little friction, and apparently without any serious injury to, or lessening of, the prosperity of our industries. As it has been necessary to create in a very short period a business which must have direct contact with approximately 200,000 employers and nearly 2,000,000 employes, it is evident that the task was no small one, and the fact that it has gone into effect without disarranging in any way our governmental or industrial fabric should be a source of congratulation to all concerned, employers, employes, and the governor with his assistants.

The State Insurance Fund, through it was commonly prophesied would not succeed in its purpose, has in an equally efficient and business-like manner intrenched itself. It is now not only a sound business enterprise but is in position to perform its functions as a regulator of the entire State business of accident compensation insurance.

The Inspection Bureau, through the increase of the number of inspectors, has been able to organize a number of new subsidiary divisions; division of building inspection, including fire prevention; division of boilers and fly wheels; division of elevators; division of mattress inspection; division of foundries; division of mercantiles; division of accident prevention; division of sanitation, etc. This

method of dividing up the work of the Inspection Bureau makes it possible to follow up the enforcement of laws to better advantage, and with experts especially chosen at the head of each of these auxiliary divisions the work of inspection is being promoted with vigor and efficiency. These new divisions do not in any way reduce the effectiveness of the work of maintaining the Woman's and Child Labor Laws and other work placed upon that Bureau for performance.

The Division of Hygiene and Engineering, in addition to its former work, has joined with the United States Public Health Service in the west, and with Dr. Alfred Stengle in the east, to establish vocational disease clinics, in order that further means may be found for the reduction of unnecessary sickness in the industries. This division is vigorously promoting safety and health, first, by forwarding rallies in the centers of industries throughout the State, by circulating simple statements of wide industrial practice, and by making available, for the bulletin boards of our industries, posters upon safety and health projects.

The Bureau of Statistics has gathered together, and has in the printer's hands, a report giving a wide variety of suggestions for improving conditions of labor, and a new and much improved industrial directory of the State, which should bring to the Commonwealth additional business with a resultant prosperity to the worker and the industries themselves. It is also supervising and handling the business required in putting the great accident and compensation law into effect under the general direction of the Compensation Board.

The Division of Municipal Information is disseminating information of much value, which will enable the municipalities of our State to perform their material functions in an economical and effective manner.

The Bureau of Mediation and Arbitration, under the direction of Mr. Patrick Gilday, whom, most of you know, has been instrumental in settling a large number of labor differences. Indeed this Bureau alone has saved to the Commonwealth much more than the entire cost of all the activities of the Department.

The Employment Bureau has been able largely to eliminate the worst practices that existed in the private employment fields. The unscrupulous private agent who unmercifully robbed his victim has been to a large extent brought to time. The whole field of private employment is being "fine tooth combed," and only law-abiding and honest men are being permitted to remain in that work. The Bureau has established public employment agencies in Philadelphia, Harrisburg, Altoona, Johnstown and Pittsburgh. These agencies are making rapid placements of men, and are being particularly useful

in finding places for even those who are mutilated and ordinarily have difficulty in getting work. The Bureau is planning to extend rapidly the number of public agencies, but is handicapped by a lack of funds.

The Industrial Board has made a number of investigations and has gathered together much information for service in its great work of building up Safety and Health Codes for the elimination of wrong practices, and for the promotion of practices which will add to the prosperity of the people. It has established in the State a Boiler Code which should reduce the large number of accidents caused by boiler explosions; has adopted a Foundry Code, an Illumination Code, other rules and regulations in connection with those previously adopted, and probably the best body of safety rules and regulations in the country.

Suggestions for Co-operation and Future Activity.

Due to the number of differences existing between employers and employes at present, the problems of the Bureau of Mediation and Arbitration are likely the most prominent at the present moment. It has been found during the past year that the Chief of the Bureau, with such assistance as could be assigned to him, from other divisions of the Department, was unable to keep in close contact with the many labor disturbances which have occurred. It is very desirable that this handicap be eliminated, and that this Bureau be sufficiently enlarged to enable it to handle the work in the State to the best possible advantage. Such an enlargement, past experience shows, would possibly be the most profitable investment the government could make. Employes and employers should, where their differences cannot be adjusted between them in an amicable manner, turn to this Bureau of the State Government for aid. The creation of a public sentiment in this direction will gradually build up a process of government mediation which will eliminate the most wasteful and inhuman labor wars of the past. It is here well to explain publicly that though the Governor of the Commonwealth was forced under the Constitution recently to send the State Militia to Pittsburgh, he did so with a distinct public statement, that he would not permit the Militia to be used by either side for the purpose of influencing unfairly the resultant settlement between the parties in dispute.

When the strength of the governmental arm is used to protect professional strikebreakers who are employed temporarily for the purpose of subduing regular workers and forcing them to capitulate, it is so acting. The Governor is rightly compelled by our Constitution

to maintain law and order, but he will not permit such unjust use of the troops, and he has called upon both sides to get together in a frank, amicable manner, and work out their differences as would two business men making a contract.

In order that the public employment system heretofore spoken of, may be rapidly extended to every industrial center in the State and through its beneficial and business-like service bring employer and employe together, you should give this system your careful consideration and make known the reason for its promotion in your local community. Where you find the private agency misusing those who registered with it, or a padrone who is improperly treating those whom he employs, you should report your findings to the Employment Bureau that the causes may be investigated.

You have already given much service to the Inspection Bureau, and through your aid we have been able to correct many abuses. It is desirable that this work be continued. It is also desirable and most essential to the reduction of the enormous number of industrial accidents in the State that every labor union in Pennsylvania have a safety committee. This safety committee should not only point out to the proper authorities unsafe places or conditions, but should study the subject of safety and present to the membership of its lodge methods whereby workers can avoid useless risks, either of bodily injury or of health. The establishment of such safety committees throughout your component parts, is to my mind, one of the most useful moves you could make at the present day. This is especially true because it is well known that the largest bulk of accidents come through carelessness and lack of understanding of the conditions by the employes themselves.

The compensation system as a whole is accomplishing its purpose, namely, that of giving free medical attention and compensation to the injured worker promptly, and without the long delays of litigation. Here and there an employer who has been given the privilege of self-insuring, has either through neglect, or other cause, failed to make such settlement. Here and there an ignorant employe has been injured who has not been sufficiently informed to know how to obtain compensation, and through this ignorance has not been given the right accorded him by the law. It is your duty, just as you have aided in the past, to see to it that cases of this kind are brought to the attention of the proper authorities. The Compensation Board has taken the position that it will not permit any employer to carry his own compensation insurance, if he fails to comply fully with the provisions of the law and make prompt and proper settlement and payment.

There are many other suggestions which the brevity of my time will not permit me to go into today, but which as the years go by, I shall communicate to your leaders. The Governor has asked me to express to you his request that you aid in every way in supporting him in his desire to improve industrial conditions of the Commonwealth in a magnanimous, reasonable manner. In this I join with him heartily. We feel that the great majority of our people, whether they be employers or employes, are honest, law-abiding, and desire that justice and fair dealing prevail. We, therefore, feel that much can be done by the study of the problem facing us to reduce, or possibly eliminate, causes which will interfere with our people's vocations, or the maintenance of our individual rights.

AN EDUCATIONAL CAMPAIGN FOR SAFETY CARRIES APPEAL DIRECT TO WORKERS IN PENNSYLVANIA INDUSTRIES.

An educational campaign to carry a message of safety and accident prevention directly to employes in Pennsylvania's industrial establishments has been instituted by the Department of Labor and Industry, in the distribution of Accident Prevention Posters to be placed on bulletin boards and in other conspicuous places around industrial plants. The posters are 8½ by 11 inches in dimensions and in attractive typographical display, each poster carries to industrial workers, in few words, a vital thought for carefulness.

The first poster of the series gives a record of accident reports for the first six months of this year showing that 1,000 persons were killed, 125,000 persons injured and over \$1,000,000 lost in wages by injuries. A display line sets forth that fifty per cent. of this enormous loss could have been prevented. In heavy black lines the worker is admonished as a final thought: "Do your work in a safe way. Is it not worth while?"

The second poster gives a photograph of a worker who lost an arm while adjusting moving machinery. Beneath the photograph appears this warning: "Do not oil, repair or adjust moving machinery. Sooner or later you are bound to suffer from such carelessness. Why take chances when injury is sure to result?" At the extreme corners of each poster are replicas of a keystone containing a white cross within a black disk with the words "Safety Always" appearing at the border of the black circle.

Commissioner Jackson has arranged for the production of a series of these posters to be issued at intervals of from two weeks to a month. They will be sent free on application from industrial establishments. Application for the original posters will insure that subsequent issues will be mailed without further application.

This unique activity of the Department of Labor and Industry, has been adopted by Commissioner Jackson for the purpose of making a direct appeal to the workers in the effort to reduce the tremendous toll of life and health by industrial mishaps.

A plea for safety is presented to employers, each month, through the Monthly Bulletin of the Labor Department which may be obtained free upon application. An Industrial Accident Prevention Conference, under the auspices of the Department, attracted to Harrisburg recently, employers representing billions of invested capital and labor leaders representing more than a million workers. Two conferences of physicians and safety engineers, from industrial plants, in all sections of the State, have been held since January 1, of this year, under the direction of Dr. Francis D. Patterson, Chief of the Division of Industrial Hygiene of the Department of Labor and Industry. At these conferences the discussions dealt with the dangers and methods of preventing industrial diseases as well as the proper medical and surgical treatment for workers injured in various ways.

Small pamphlets giving Timely Hints for the guidance of workers in safeguarding themselves from accidents and illness have also been issued by the Department of Labor and Industry and are available upon application. The latest printed plea for safety is the Accident Prevention Poster, now available for the purpose of appealing direct to the workers.

BUREAU OF INSPECTION AND DIVISION OF INDUSTRIAL HYGIENE CONTINUE SAFETY WORK BY ESTABLISHING FIRE DRILLS, CONDUCTING EDUCATIONAL CAMPAIGNS AND PROMOTING THE USE OF SAFETY APPLIANCES.

One of the principal activities of the Inspection Bureau is the establishment of proper fire drills in manufacturing plants, mercantile establishments and public schools. Work that is being accomplished along this line in co-operation with officials of municipalities is outlined in the following article, published in the Reading Eagle of August 13:

Safety first is the dominant note in the protection of thousands of employes in the mills and factories throughout the city.

One of the precautionary measures taken by owners of mills is a series of fire drills. The State Department of Labor and Industry is co-operating with Fire Chief Niethammer and the Firemen's Union committee on fire prevention and control, together with the Reading chamber safety council and the manufacturers' bureau of the Chamber of Commerce for systematic fire drills in all the stores, mills, factories and schools.

Wherever human life is likely to be endangered by means of fire, panic or dangerous machinery, educational methods are being introduced to safeguard the life and limbs of employes and inculcate the principles of safety first. All exits and fire escapes are properly marked with sign boards by day and red lights by night.

EMPLOYES INSTRUCTED.

In the mills and factories the employes are instructed by the foremen on the proper methods of leaving the buildings quickly in case of fire. An instance of the perfect control that the employers have over their help was made at the recent inspection made by Chief Niethammer at the large factory of Nolde & Horst, when more than 1,000 employes left the huge plant in less than three minutes' time.

As an example of the fine work along fire drill lines in the local schools was a demonstration held at the High School for Girls, under the direction of Miss Mary H. Mayer, the principal, at which time the students, who numbered more than 700 of the feminine sex, without any previous warning other than the regular tapping of the school alarm, left their desks in the study rooms and marched out the building in a minute's time. This demonstration was staged for the benefit of a committee of newspapermen from the three afternoon papers.

In many of the local industrial establishments fire drills are held at least three times a month and in many instances girls and women are obliged to descend the fire escapes, which are built on the outside of the buildings, to accustom them to this means of egress.

SAFETY FIRST FILMS WERE SHOWN IN READING.

Recently, under the direction of the State Department of Labor and Industry, a series of nightly demonstrations were held at the Orpheum Theater. This was known as fire prevention and industrial safety week. Speakers from the State Department addressed large gatherings of workingmen and women every night. A feature was motion pictures showing fire prevention and industrial welfare and safety measures. These were especially prepared for the department by the Lubin Co. and several other large film corporations.

The pictures showed views of factories and how the drills were conducted, the proper methods of opening doors and how to combat an unexpected fire. The finest example shown on the screen of modern methods was a picture of a fire drill and other safety measures, taken at the Eastman Kodak Co.'s plant at Rochester, N. Y.

Eliminating Danger in Elevator Travel.

The subject of installing modern door interlocking devices on elevator hoistways is one that requires the attention of owners and lessees of buildings, the building trade, and those who are interested in furthering the cause of accident prevention.

The number of persons injured and killed throughout the United States by preventable elevator accidents is appalling, and is increasing constantly owing to the never-ceasing erection of buildings, within which countless elevators are installed.

It was estimated that in 1912 there were between 7,000 and 8,000 fatal accidents on elevators, in the United States and about 10,000 persons injured. From 1908 to 1912 in New York City alone upwards of 400 persons were killed on passenger and freight elevators, and a greater number were injured. Among those killed were many persons of prominence although the greater portion were poor persons with families depending on their support. One woman was crushed to death by an elevator in a large office building, the car suddenly shot upwards while the door was open.

These accidents, which could, perhaps, have been prevented, suggest that only carefulness can mean safety when using elevators. The accidents described were caused by the negligence of the operator, or by defective locking devices on the doors of the elevator hoistways.

Inspectors of this Department find that many elevators do not have interlocking devices. Such devices are immediately ordered, in order to prevent accidents and to conform with the law.

The inspection force of this Department is also finding that at the present time many hoistway doors are equipped with latches that are not reliable. These latches will not work if the door is closed too rapidly, as the doors invariably rebound from the closed position. Then too, if the doors are not pushed or pulled forward with sufficient force they will stand ajar. When these dangerous conditions are created, and it happens that the car has either just left the landing at increasing speed, or if it is not near the landing at all, elevator accidents are almost inevitable.

On occasions when the car is about to resume its journey, and the door has rebounded from the closed position, serious accidents are frequent. A person who is waiting for an elevator may rush forward seeing the open door, and then, if the operator fails to see the person, an accident results, owing to the speed of the elevator, which soon carries the person's body far enough to be crushed against the enclosure of the hoistway. Where the door is ajar and the elevator is at some other landing, a person seeing the open door rushes forward and may fall into the hoistway.

It may properly be said that elevator accidents happen mostly in and about the elevator hoistway doors, and that only a small proportion of the accidents are attributable to defective hoistway machinery. The dangerous conditions that are created, such as those that arise from an act of carelessness on the part of the operator,

who moves the car before the door is closed, or fails to make certain that the door is properly latched before the car leaves the landing, could be eliminated by the use of an interlocking device.

Several hoistway door or gate locking devices have been developed and are now on the market. Most of them are so constructed as to prevent any movement of the car until the door or gate is fastened securely. Thus the operator is compelled at all times to close the door or gate, as the car cannot be moved until this is done. The dangerous practice of starting an elevator either up or down, before the passenger is safely inside or outside, is eliminated. On a general inspection of elevators in a Pennsylvania city, made by the head of the Division of Elevator Inspection of this Department, in company with the Chief Elevator Inspector of that city, there were found some new interlocking devices which had been installed and were not reliable. When the hoistway doors were wide open, the car could not be started, but when the doors were four inches open, the car could be started. Such a device does not have complete control of the operating switch or hoistway door. Again when the car was twelve inches away from any floor, the doors could be opened and the car operated.

The State of Pennsylvania, after years of experiment and study, approves none but mechanical interlocks for passenger elevators. For years the city of Philadelphia has refused to approve electric contact devices, the Bureau of Elevator Inspection holding that electric contacts do not provide the essential safety, being installed in series and wired from basement to roof so that every shaft door is dependent on the condition of every other shaft door. The Commonwealth likewise will not permit electric contact devices exclusively.

Electric contacts are often out of order. The first cost of the contacts may be less, but their eventual cost is greater than the mechanical safeguard. Their operation depends absolutely upon frequent inspection and careful maintenance. If a fire occurred in a building where these electric contacts were installed on elevator doors, and the operator should run his car up to the tenth story to rescue the occupant and start down, but in the meantime the firemen should arrive and break in one of the elevator doors in the basement they would thereby destroy the electric contact on that door and shut the power off the elevator. The result would be that the elevator would be stalled in the shaft and the passengers in the elevator suffocated by the smoke.

One very often hears of a passenger elevator operator falling over in the elevator car due to stroke or other illness and even if the car switch handle does automatically return to its center, to stop the

car, in most cases the operator is badly injured before the car comes to a stop. There is certainly no reason why an accident of this kind can not be prevented, and under the new Elevator Code, which has been adopted by the Industrial Board, every passenger elevator must be provided with a collapsing gate and an electric contact installed, so the gate must be closed before the car can be moved from any floor. The contact is closed and opened by a fiber roller carried on the collapsing gate, the contact proper being mounted in a stationary position. This roller engages the contact lever which is so designed that the contact is positively opened by its own weight and positively closes so that the operator can not move the car until this gate is closed.

Fatality Averted in Elevator Hatchway.

Recently, a man under the influence of liquor crawled into a pit of an elevator, the shaft of which was open at one side toward the street for the convenient loading of merchandise on wagons and trucks. The level of the loading floor was four feet above that of the street. The elevator gate was of a sliding type, with side legs extending below its body, leaving an opening of two feet between the floor and the lower edge of gate. The man's head and shoulders extended through this opening into the elevator shaft when he was discovered by a policeman and arrested. Had the car descended while he was in this position, another fatal accident would have been chronicled.

A condition of this kind offering a climb of only four feet for investigation is quite a temptation to the average small boy or girl.

The aim of the Industrial Board of Pennsylvania is to eliminate such conditions and the efforts of the Department of Labor and Industry are being put forth to investigate and to remedy them. Section 506, paragraphs "d" and "g" of Safety Standards on Elevators, rules very clearly on this subject:

d. "All gates shall be provided with a lock so arranged that the gate cannot be raised unless the car is opposite the landing."

g. "Where the entrance to the elevator is on the street or to the outside of a building at the ground floor, the gate shall be not less than six (6) feet in height and the clearance under the lower bar shall be not more than two (2) inches. In all cases these gates, whether made of wood or metal construction, must be covered with a wire mesh that will reject a ball one (1) inch in diameter."

Compliance with these sections eliminates the possibility of a fatal accident. The door automatically locks when the car is away from the landing. The modern manufacturer aims to make his product "fool-proof." The caution sign has no effect on a drunken man.

The responsibility for an accident resulting from the above condition rests with the owner. His argument may be, "If he is drunk and foolish enough to put his head into danger, let him suffer." From the humane standpoint, one must think of the unfortunate wife and children or the dependent parents.

The enforcement of the Elevator Standards adopted by the Industrial Board of Pennsylvania, and operative after July 1, 1916 is under way. Word has gone out from the Department of Labor and Industry to all inspectors to be on the lookout for dangerous conditions at all old elevators and not to permit the installing of new ones until plans have been submitted to this Department for approval.

The local inspector, immediately upon hearing of this case of the drunken man, investigated the conditions and issued instructions to the owner of the above mentioned elevator to conform to the Industrial Board Standards without delay.

Employer and Employee—Both Should be Watchful.

The necessity of extreme watchfulness on the part of employes and employers alike is shown very forcibly by two fatal accidents which recently occurred in two industrial establishments.

In one case a foreign-born employe walked up a flight of steps and started to cross the railroad tracks in the path of a locomotive pushing a flat car. Before the brakeman, who was standing at the rear end of the car, instead of at the front end, could call out, this foreigner was struck.

As soon as the brakeman saw the man starting to cross the tracks he signalled the engineer to stop, but this could not be done soon enough. It seems unfortunate that this man's life had to be forfeited because of carelessness. The foreigner left a wife and two children.

So far this year there have been almost a dozen fatalities which have occurred in a similar manner. Employes heedlessly rush across tracks without giving a glance in both directions to see if cars are coming towards them. It should be the effort of all managements to prevent employes from crossing railroad tracks. This can best be done by removing the necessity for such crossing by constructing bridges or subways at convenient points and making it impossible for the men to cross the tracks at grade by erecting suitable fences or guard rails. As long as it is possible or necessary for employes to cross tracks, especially on the premises of the plants themselves, just so long will there be a chance for similar accidents to occur.

Then, too, it is absolutely necessary that a brakeman be located on the front end of a shift of cars. Not long ago an inspector of the Department was visiting a large steel mill. While walking through the yard, he noticed a yard locomotive pushing about twenty-five small yard cars along the track. As he watched the cars being pushed along he noticed there was no brakeman or employe on the front end. A short distance ahead, the track made a sharp turn so that it was impossible for the engineer to see the other end of his train, yet he made no attempt to lessen the speed. The cars, on the contrary, were run through the yard at a lively rate past piles of material placed very close to the tracks. The danger was very apparent and when it was pointed out by the inspector to the official in charge, the latter took immediate steps to see that such careless practice was discontinued.

If it is absolutely necessary to shift cars by means of a locomotive on the rear end of a train, it is almost criminal carelessness to do so without having a brakeman on the front end to give warning.

The second accident in question occurred in the following manner:

A laborer was engaged in handling metal bars. A crane overhead was lifting a quantity of these and while a load was in mid-air this laborer stepped under the load. At that instant the chain broke and the bars dropped, crushing the man and causing instant death.

As in the case of most fatal accidents, the Department sent one of the inspectors to the scene of the accident to see how it happened and to try, if possible, to make suggestions which would prevent the occurrence of another accident from the same cause. After hearing all the facts in the case it was apparent that the laborer had been very careless in walking under the load which the crane was lifting. Of course under no circumstances should any person stand under suspended loads.

The inspector then made an inspection of all the chains which were being used on hoisting apparatus in that plant. He found two sets of chains stretched and worn at the links. They were immediately condemned and new sets installed.

Further questioning revealed the fact that the company has a good crane inspector who goes over the cranes every day. When he was asked why he didn't go over the chains, he said that was not in his line.

It is the duty of every management to see that all parts of hoisting apparatus are in good condition. Of what use is an inspection which observes the condition of only one part of the hoisting apparatus?

The Department inspector not only recommended to the superintendent that the inspection be made thorough, but also advised the formation of safety committees among the employes. These committees could be of great assistance in making that particular plant free from accidents which could be avoided.

Code for Inspection Reports.

A new feature of the inspector's work in the Department of Labor and Industry is the "code" system started August 1, 1916. The plan of the system is to reduce the clerical work of the inspectors in the field, so that more time and attention can be given to actual inspection and recommendations. In filling out the items on the inspection reports most of the questions are answered by figures called for in the code.

A ten days trial has shown that the results are satisfactory. A number of the items under the old system, for instance, the description of fire equipment, nature of visit, kind of business, construction of building, etc., required considerable writing and the size of the forms did not allow for sufficient space for very much description of the inspection. It is also of great assistance to the office force in tabulating and classifying, and in the final filing of the reports. At first there were a number of errors but the inspectors are rapidly becoming familiar with the code and are pleased with the change.

BUREAU OF MEDIATION ACTIVE IN SETTLING STRIKES DURING AUGUST.

The Bureau of Mediation and Arbitration was active during the month of August in its efforts to adjust difficulties and misunderstandings between employers and employes in various sections of the Commonwealth. One of the most conspicuous examples of the work being performed by this Bureau is given in the following reprint from the Johnstown Daily Democrat of August 21:

Operations at the Portage silk mill, which have been at a standstill for several months, on account of a strike, were resumed on Saturday morning, the strike having been settled through the efforts of Patrick Gilday, a member of the State board of mediation and conciliation. The strikers will get a 50-hour week and a seven per cent increase in pay.

Mr. Gilday met with Herman Levy, one of the owners of the mill, who came here from New York, and matters were quickly adjusted. Lack of material prevented all the old employes from returning to work Saturday morning, but supplies will be on hand and every department will be working full blast to-morrow morning.

When the plant closed 110 employes were at work, about 60 of these returning to their posts Saturday. The work of installing the machinery in the partially completed addition to the mill will be pushed as rapidly as possible and when this work is finished more employes will be needed.

The strikers asked for an eight hour day, but agreed to compromise on a nine-hour day with five hours on Saturday. The 10 per cent bonus given the employes before the strike continues, in addition to the increase of seven per cent.

E. S. Henry, Burgess of the Borough of Portage, wrote the following letter to Commissioner Jackson, August 18:

Hon. John Price Jackson,
Commissioner of Labor and Industry,
Harrisburg, Pa.

Dear Sir:

In behalf of the business people of Portage, and myself as well, allow me to thank you for your prompt attention in reply to request sent you under date of August 12-16.

The trouble that has been existing at the E. & H. Levy Company since June 2, 1916, has been adjusted and the employes returned to work. We are also grateful to Mr. Patrick Gilday, for the way in which he handled the situation.

With kind regards, I beg to remain,

Respectfully,

(Signed) E. S. HENRY.

Three Separate Strikes Settled in Allentown.

The following clipping, from the Allentown Morning Call, of August 5, describes the settlement of three strikes in that city by a representative of the Bureau of Mediation:

Satisfied that his work here is about completed, J. J. Coffey, who has charge of the Philadelphia office of the State Department of Labor and who was sent here by Commissioner John Price Jackson, will return to Philadelphia this morning.

He has been here one week and during that time succeeded in settling the machinists' strike at the International Motor Company's plant, the plumbers' strike after it had been going nearly three months and last evening the electricians, by an almost unanimous vote, agreed to accept the terms brought to them by Mr. Coffey from the electrical contractors. A few minor details remain to be settled to-day but it is practically certain that the men will return to work.

The electricians have been receiving an average of thirty-two cents per hour. They wanted forty-five. The contractors authorized Mr. Coffey to offer them a minimum wage of thirty-eight cents per hour, or an increase of at least six cents. The scale for electricians' helpers has not yet been arranged but it is certain that it will be about the same as that arranged for the plumbers. The electricians also want the contractors to pay carfare home once a week when they are employed away from home. As most of the contractors had been doing this previous to the strike, no trouble is anticipated from this end.

Mr. Coffey came here at the request of David Williams, organizer of the machinists' union.

Mediation Bureau Assists at Franklin.

A representative of the Bureau of Mediation participated in effecting a settlement of labor difficulties, existing at the plant of the Franklin Manufacturing Company, at Franklin. Through the efforts of M. T. Fredericks, delegated to the work by Patrick Gilday, Chief of the Bureau, a talk was given the employes by General Charles Miller, Chairman of the Board of the Franklin Manufacturing Company, and as a result of this talk, and conferences, the difficulty was adjusted.

The Venango Daily Herald, of August 28, commenting on the work of the Mediator and this Department, said:

Mr. Fredericks, representing the Department of Labor and Industry at Harrisburg, was responsible for bringing about a talk by General Miller to the men.

The function of the Department of Labor and Industry, in the handling of labor matters, seems to rest purely in the bringing of the two contending factions to a clear understanding of one another's positions and to keep all material offered for discussion within proper limits as regards State regulations and the real objects to be obtained. Mr. Fredericks seems very well qualified for his work and reflects credit upon the Department which has recently been revitalized and is doing so much to bring about a closer relationship between capital and labor.

INDUSTRIAL BOARD CREATES COMMITTEE FOR APPROVAL OF SAFETY DEVICES AND FORMULATES ADDITIONAL SAFETY CODES.

In order to establish a list of safety devices which meet the requirements of the various regulations adopted by the Industrial Board of the Department of Labor and Industry, this Board recently created an Approval Committee to pass upon all such devices.

By establishing such a list of approved devices, several desirable objects will be obtained. The employers of the State will know that all devices on this list will meet the requirements of the Department and will be approved by any inspector, who may be inspecting his establishment. The inspectors of the Department will largely be relieved of the necessity of passing upon safety devices as to their compliance with the Industrial Board rulings. In as far as the

approval of safety devices is removed from the judgment of the several inspectors and placed in the hands of one committee, the interpretations of the Industrial Board rulings will be made uniform throughout the State.

A further important result of the work of this committee, will be in the business-getting possibilities to the manufacturers of safety devices. They can, with perfect propriety, assure their customers that devices manufactured by them and approved by this committee, will meet all legal requirements and will also afford effective protection to employes.

This committee is composed of two members of the Industrial Board, the engineers and experts of the Division of Hygiene and Engineering, the Safety Engineer of the Department and the Chief Inspector. Each member of this committee is an expert on safety work and safety appliances and well qualified to act in such capacity.

In order for a device to receive consideration by the Approval Committee, the application must be accompanied by the article itself or a working model of it, an 8" by 10" unmounted photograph, and a copy of the Underwriters' Laboratories approval, if it has been presented to these Laboratories. Any safety device or guard relative to the safety of factory employes in Pennsylvania, will be acted upon by this committee, although the committee has ruled that it can not act upon the material for use in constructing guards.

The action of this committee in approving any device, is then reviewed by the Industrial Board and if ratified by the Board, a certificate of approval bearing the seal of the Commonwealth, is issued. It is believed that the co-operation of the manufacturers of safety devices in this move, will result to great advantage not only to these manufacturers themselves, but also to all employers in the State.

Code for Explosives Formulated.

Definite regulations for safety of workers in plants manufacturing explosives have been formulated in an Explosives Code prepared and tentatively adopted by the Industrial Board. Authorities on explosives, heads of plants manufacturing explosives, engineers and chemists were afforded an opportunity to appear before the Industrial Board to voice their views on the details of the code, offer suggestions and recommendations at a public hearing before the Board.

This code will apply to all plants manufacturing or using explosives, explosive gases and vapors and poisonous nitro and amido compounds in all parts of the Commonwealth. Experts of the De-

partment of Labor and Industry are conferring with officials of the Department of Labor, in New Jersey with the aim of adopting an Explosives Code that may be uniform in both New Jersey and Pennsylvania so that large powder concerns, with plants in both States may be governed by a single set of regulations. The same purpose is desired in the adoption of codes now being prepared to protect employes from gases and vapors in chemical works and to safeguard workers in paint manufacturing establishments from the dangers of lead poisoning and other hazards.

The Explosives Code comprises approximately fifty typewritten pages. It deals in exhaustive detail with the manufacture of all classes of explosives as black powder, dry guncotton, nitro-glycerine, dynamite, chlorates, picric acid, picrates, fulminates, fireworks, smokeless powder, inflammable oils, and coal tar products. Structural features of explosive plants are outlined in the code. Adequate ventilation is required to prevent accumulation of explosive vapors. Every precaution is outlined to prevent explosions from electrical installations, naked lamps or matches. The use of metal tools is prohibited in most instances. The number of employes, working in various hazardous places is limited so that a mishap may not cause general loss of life.

Danger signs are required and certificates of approval, for each plant, must be obtained from the Commissioner of the Department of Labor and Industry. These certificates must be conspicuously posted.

The code would prevent persons from entering explosive plants excepting employes or persons properly authorized. It would exclude from the premises of such plants persons upon whom the odor of liquor can be detected. Even lists of loose articles and tools in explosive buildings would be required to be kept.

The regulations stipulate that all employes in explosive plants must wear shoes without iron or steel nails. One pocket is allowed in the blouse of an employe's clothing. Neither iron nor steel buttons or metal attachments are allowed and metal objects in the pockets such as knives or keys are prohibited.

In the nitrate house, for nitro-glycerine manufacture, there would be sheet lead floors required and thermometers attached to battery switches supplied to each nitrator so that an alarm bell would be rung when the temperature reaches 80 degrees.

Only wooden shovels and wooden rakes would be allowed in the nitro-glycerine house and the maximum amount of nitro-glycerine allowed in such buildings, at one time, would be 150 pounds.

Electrical Code Means Safety for Workers.

Every phase of installation of electrical equipment that threatens danger to workers in Pennsylvania industries is considered in the Electrical Code recently adopted by the Industrial Board. This latest code of almost a score that have been adopted by the Industrial Board, to eliminate industrial dangers, was passed following conferences with electrical engineers, electrical experts and on definite recommendations from the National Bureau of Standards at Washington. The provisions of this code do not conflict with underwriters rules or any other similar set of regulations governing electrical installations.

The primary purpose of the Electrical Code is to reduce accidents from electricity by safeguarding danger points. This has been accomplished by requiring guarding of all "live" parts of electrical equipment. All such parts which may accidentally become "live" must be connected with the ground. Similarly circuits and wires must be "grounded" at proper designated points.

Every precaution is outlined to eliminate dangers from a careless action by an employe. Proper warning signs are required. Circuits and switches must be properly located and marked. It is also planned to have organizations of employes effected in every establishment in such a manner that responsibility for electric accidents can always be definitely fixed.

The Electrical Code is chiefly technical and is exhaustive in its treatment of the varied types of electric wiring and apparatus. As a result of the conferences held by the Industrial Board with the best practical experts, employers and employes prior to the formulation of safety codes applying to the various industries, the result is usually the establishment of workable regulations considered essential by those actually engaged in each industry. The aim of the Board is to establish safety but to avoid making unworkable rules that impose hardships.

The Electrical Code will be printed, as have the other codes adopted by the Industrial Board, and will become operative after it has been in circulation.

Crane Code Under Discussion.

Representatives of industrial plants manufacturing and using electric traveling cranes, consulting engineers, and representatives of inspection bureaus attended a conference held by the Industrial Board of the Department of Labor and Industry, at the Capitol, Tuesday, August 22.

Suggestions and criticisms were given on the code drafted for adoption by the Industrial Board for safety in electric crane manufacture and operation. The draft of the code covers the structural features of cranes and also specifies rules to be observed by operators, signalmen, floormen and repairmen in crane maintenance and operation.

Some Reasons for Adoption of a Crane Code.

A workman was engaged in handling girders. After adjusting the clamps on one, he stepped upon it and signaled for it to be raised. Unfortunately for him, the clamps slipped and he was shoved off and fell a distance of ten feet to the ground. His head struck an iron stringer lying there. Death resulted from a fractured skull.

It is foolhardy to ride material which is being hoisted and all crane operators should be emphatically warned and directed not to hoist material while anyone is on it.

* * *

A workman in a steel mill had placed a crane chain hook onto a hook of a hot metal ladle for the purpose of turning the ladle over to clean it out. After the ladle had been turned over, he placed a block of wood between the bottom of the ladle and the truck in order to keep the ladle in this position, so that the chain could be unfastened. The block, however, was not placed safely, so he signaled to the craneman to raise the ladle again. As it was raised, the block fell to the ground beneath the truck. As the man reached over the truck to get the block of wood, the crane chain slipped off of the hook of the ladle. This caused the ladle to return to its regular position and in doing so, caught and crushed the workman's head between the truck and the bottom of the ladle.

If greater care had been exercised on the part of both the workman and the craneman, the former's life, no doubt, would have been saved. Under no circumstances is it safe to be under suspended loads.

* * *

Another steel worker in a forge shop was standing in a doorway between two departments taking a short rest. A craneman overhead, who was talking to another craneman who had climbed up into his cage, ran the blocks up too far, so that the cables were sheared off and the blocks fell and struck the man standing below, killing him instantly. This happened notwithstanding the fact that the crane was equipped with a safety stop.

No person should be allowed to visit the operator of a crane in his cage, and further, the safety stop on the crane should be of such a type as to insure its operation under all conditions.

* * *

A laborer on a slag dump was engaged in unloading slag cars by means of a locomotive crane. Notwithstanding that he had been warned to keep off, he rode on the front end of the crane while it was being taken to a water tank for water. Before the crane reached the water tank, it was necessary to swing the cab around. A signalman was also abroad the crane but he got off before it reached this point. For some reason, the laborer, either because he did not hear or understand, did not do the same and when the cab was swung around, his head and body were caught between the bottom of the cab and car body. His death resulted instantly.

Positive orders for employes not engaged in operating such machinery should be issued, forbidding their presence on such machine and then means taken to see that these orders are carried out.

* * *

An Italian laborer was assisting in cleaning out a car which had been loaded with scrap metal for open hearth furnaces. Without being seen by the operator of an electric magnet, which was assisting in the work, the laborer entered the car. The operator could not see the whole of the car and during the use of the magnet, the latter struck the laborer on the head. He died within a few hours.

Warnings have now been given to all crane operators to refuse to work with their magnets in cars where men are known to be or in which it is likely that they may be. In addition the men themselves were again warned against entering cars where magnets are working.

* * *

Statistics clearly demonstrate that the danger of accidents occurring in connection with hoisting apparatus is an ever present one. The descriptions of these few, which have occurred within the last few weeks, also show this conclusively and suggest that carefulness is practically the only way in which they can be prevented. Rules may be made, and justly so, for both operators of hoisting machines and also for the men engaged in assisting in the work, but if these persons are not impressed with the importance of such rules and the necessity that they be carried out and also that good judgment, carefulness and caution are needed, in addition, lives will continue to be sacrificed.

A meeting of the operators of this type of machinery, together with those employes who may work near the material which is hoisted or handled, might be a very valuable means of showing all concerned the necessity for watchfulness at all times. A discussion of various types of crane accidents could very profitably be taken up at such meetings and suggestions be asked from the men, themselves, how similar accidents could be prevented in the future. If carried out faithfully, such a program could not help but impress the men with their responsibility and cause them to think. If they think first, the number of accidents will surely be reduced.

Newspaper Comments on Work of Industrial Board.

The following article, published in the Philadelphia Public Ledger of August 9, reviews some of the work accomplished by the Industrial Board:

Pennsylvania blazed new trails in the nation-wide "Safety First" movement when the Industrial Board of the State Department of Labor and Industry yesterday adopted complete working codes of safety standards for the thousands of workers in the textile and electrical fields. The board met in the North American Building in an all day session under the chairmanship of Commissioner John Price Jackson.

This is the first of all the States in the Union, according to the board, to adopt such codes, which provide for the guarding of the workers about all textile machines and electrical plants, appliances, equipment and machines. These codes provide for safety in every detail of the vast amount of machinery used in these two great fields; are the result of two years of co-operation between the State, theorists, practical men and women, workers, mill owners, and manufacturers; and finally, they will serve as models for all of the other States. Moving pictures will be used to demonstrate their efficiency in any city or town in the State which may desire them.

These safety standards, it was pointed out, flow from the social and humanitarian legislation enacted in the last two sessions of the State Legislature. The enactment of the workmen's compensation law, providing for compensation to workers and their dependents in the event of injury or death, said Mrs. Samuel Semple, of Titusville, a member of the board, was a moving factor in winning thorough co-operation in the drawing up of the "safety first" codes. For the better the workers were guarded from injury or death by practical appliances, she pointed out, the fewer the number of accidents and deaths, and hence the fewer the number of claims for compensation. A safety code for workers in munitions and explosives is in process of preparation.

The State and national significance of the adoption of the codes was summarized by Mrs. Semple in these words:

"The textile safety code may be appreciated the more when it is known that machines in the textile industry have been largely unguarded. That state of affairs was not due to any unwillingness on the part of the mill owners, but a universal and practical scheme had never been worked out. Now we have the first complete code of the kind. The mill men helped us all the way through. Owners of lace mills, in fact, tried the scheme as it was forming, so that we might

have a practical and working demonstration of its efficiency. The code will affect, under the direction of the State, these branches of the textile industry: Carpet, plush, woolen, cotton, tape, silk, underwear and hosiery, upholstery, lace, dyeing and finishing and sewing machines in mills and factories.

"To draw up the code there was a separate committee for each branch, each composed of a worker on the machine, a maker of the machine, a representative of the owner of the mill and a representative of the State board. The adoption of the textile electrical codes makes about 18 codes which have been adopted by the board. The other 16 include power transmission, stationary engines, machine tools, forging and stamping, polishing and grinding, compressed air, woodworking, bakeshops, fire prevention, canneries and foundries. The codes will be enforced by the State Department of Labor and Industry in accordance with the provisions and penalties of the law. Labor unions, as well as employers, will be asked to co-operate in this enforcement. It goes without saying that the codes affect a host of employers and thousand of workers, male and female.

"The Electrical Code was drawn up jointly by the State, the National Bureau of Safety Standards, associations of electrical men, underwriters and, in fact, by all elements concerned. Again, this is the first such code to be adopted, and it has been drafted in such a way that the code can be uniform for the whole country."

The tremendous growth of the munitions industry and the possibilities which may flow from the national preparedness program, said the members of the board, lend unusual interest to the codification of safety standards for workers in explosives. The Pennsylvania code is being worked out by the authorities and factors concerned in this State in conjunction with those of New Jersey. A public hearing on the question will be held on a date to be announced later, to which the manufacturers of this State and of New Jersey will be invited to express their views. Dr. Alice Hamilton, an expert attached to the Federal Government, will be among the speakers.

Another Viewpoint on Industrial Board Codes.

The following editorial, published in the Philadelphia Press, of August 11, also reviews, editorially, the activities of the Industrial Board for safety:

One result of the passage of the workmen's compensation law and other recent humane legislation is the adoption of complete working codes of safety standards for the electrical and textile industries in this State. This increases the number of codes for various industries which have been formulated by the Industrial Board of the State Department of Labor and Industry to eighteen and places Pennsylvania in the position of a pathfinder in this regard, as no other States as yet have safety codes for the electrical and textile industries.

The other codes previously added to the regulations of the department include power transmission, stationary engines, machine tools, forging and stamping, polishing and grinding, compressed air, woodworking, bakeshops, fire prevention canneries and foundries. The textile safety code will affect the following branches of the textile industry: carpet, plush, woolen, cotton, tape, silk, underwear and hosiery, upholstery, lace, dyeing and finishing and sewing machines in mills and factories.

All these industries named in which thousands of men and women are employed can now adequately protect the lives and limbs of their employes by following the regulations of the department regarding the use of safety devices. No standards have been set that are impossible, unjust or difficult to comply with. As an ex-

ample of the methods by which these codes were drawn the procedure followed in the textile industry is interesting. There was a separate committee for each branch of the industry composed of a worker, a maker of the machine, a representative of the mills and a member of the State Board. The electrical code was drawn up by the joint efforts of the State, National Bureau of Safety Standards, associations of underwriters, electrical experts and all other parties concerned.

The adoption of such standards is an outgrowth of the "safety first" movement. Aside from the humanitarian considerations involved it pays manufacturers and corporations in dollars and cents to comply with the safety standards. Fewer accidents will mean a smaller contribution from the employer for "workmen's compensation." Fewer accidents also cut the expense involved in replacing an injured, efficient workman. The Department will enforce these codes firmly and in accordance with the provisions and penalties of the law. But no manufacturer who is abreast of the times will hesitate to take the initiative and invite the co-operation of the State in making his machinery as safe as it can be against accidents to his employees.

AN INCIDENT IN THE DAY'S WORK OF THE WOMEN'S DEPARTMENT—PHILADELPHIA OFFICE OF THE BUREAU OF EMPLOYMENT.

Mr. and Mrs. ———, of ———, applied to the Philadelphia office of the Bureau of Employment on Monday, May 1, for work. It appears that this couple with their little girl, eight months old, spent the night in Broad Street Station, and were picked up by the Travelers' Aid Society and directed to the Bureau. This case was a hard one to handle in that the couple had no money for their week's lodging and that they had a baby to take care of. They had planned to get work in the city and to place the child in a day nursery, or to get work on a farm, where the wife could assist with the housework while the husband did the outside work, and in this way keep the family together. The Bureau had no positions of the sort open, and so communicated with the Federal Bureau but it reported that it had nothing of this type open at that time.

The next step was to get work by the day, for husband and wife and temporary shelter for possibly two or three nights. It would have been no trouble to have found shelter for the man, but at three different homes for women, it was found, in each case, that some rule prevented the wife from entering.

The Men's Department sent Mr. ——— out to ———, while the Women's Department kept Mrs. ——— and the baby until the husband reported whether or not he had received the position. While he was out looking for this work, a man applied to the Bureau for a housekeeper. Mrs. ——— hearing his request and being desperately in need of a home and shelter, appealed to the man, and told

him that she and her husband would be willing to go to Chester, where he lived. The man also being very badly in need of a housekeeper seemed perfectly willing to take the whole family to Chester with him, and promised to get the husband a position. Within the course of an hour the husband returned to the Bureau and reported that he had obtained the position to which he had been directed. However, when every one considered the proposition the man from Chester had placed before the couple, and knowing the conditions under which they would have to live in Philadelphia, all three being separated, it was concluded that if the man could get employment and the woman a place as housekeeper in Chester they could all board together, and it would be the best thing for them.

The Men's Department called up Baldwin's and got in communication with one of the head men there and placed the case before him. He said that he could give Mr. ——— work and would gladly take him on under the circumstances. The Men's Department also called up the foremen of the shop where the employer from Chester worked and inquired as to his standing in the community. The foreman reported that his standing as to character, etc., was the best. The matter was finally settled and the family started off to their new home.

July Record of the Employment Bureau.

Twelve hundred and seventy-seven applicants for work in Pennsylvania were placed in positions through the five offices of the Bureau of Employment of the Department of Labor and Industry, during the month of July.

During that month, requests for 3,753 employes were made by employers in various parts of the State and 2,038 unemployed persons applied for work at the five offices of the Employment Bureau. The complete record, for the month of July, in the separate offices is as follows:

HARRISBURG.

Total number of persons asked for by employers, ...	465
Number of applications for positions, ...	231
Number of persons referred to positions, ...	191
Number of persons receiving positions, ...	181

PHILADELPHIA.

Total number of persons asked for by employers, ...	591
Number of applications for positions, ...	787
Number of persons referred to positions, ...	551
Number of persons receiving positions, ...	507

JOHNSTOWN.

Total number of persons asked for by employers, ...	226
Number of applications for positions, ...	56
Number of persons referred to positions, ...	49
Number of persons receiving positions, ...	45

PITTSBURGH.

Total number of persons asked for by employers, ...	2,233
Number of applications for positions, ...	917
Number of persons referred to positions, ...	562
Number of persons receiving positions, ...	512

ALTOONA.

Total number of persons asked for by employers, ...	238
Number of applications for positions, ...	47
Number of persons referred to positions, ...	37
Number of persons receiving positions, ...	32

TOTALS.

Total number of persons asked for by employers, ...	3,753
Total number of applications for positions, ...	2,038
Total number of persons referred to positions, ...	1,390
Total number of persons receiving positions, ...	1,277

To Protect Worker from Extortion.

An investigation, aimed to protect alien employes and native workers in industries from extortion or other frauds practiced by some foremen and petty bosses in industrial plants, unknown to the heads of the establishments, has been under way for some time under the direction of Commissioner Jackson.

As a result of the investigation, conducted through the Employment Bureau, a foreman, employed in a manufacturing plant, in the western part of the State, was arrested in Pittsburgh.

Seven affidavits have been obtained, by agents of the Labor Department, from Italian laborers who allege that the foremen had been obtaining \$10 on each pay day, for a period of approximately two years, from five workers.

Another affidavit, from a laborer, alleges that he was compelled to pay \$4 to the foreman to obtain a job in addition to a bonus every pay day. The Labor Department has the full co-operation of the heads of industrial plants and labor leaders in conducting the investigation.

Commissioner Jackson has ordered the investigation under the authority created by the Employment Agent's Act passed by the last Legislature. Section 19, empowers the Commissioner to investigate all improper practices with respect to frauds against employes and aliens.

New Location of Harrisburg Office.

The Harrisburg offices of the Bureau of Employment, of the Department of Labor and Industry, have been moved from the Masonic Temple Building to larger quarters in a property owned by the State at 143 North Fourth street. All applicants, in person or by letter, for employment or employes, should be made at the new address.

A feature of the new quarters is separate application rooms for men and women seeking work. Women applying for positions now tell their wants to female clerks in an application room apart from the application room for men.

HEAVY TOLL OF INDUSTRIAL ACCIDENTS IN AUGUST. WORKMEN'S COMPENSATION AIDS VICTIMS AND DEPENDENTS.

Two hundred and forty-six workers were killed in the industries of Pennsylvania during August. This is the highest toll of any single month during the present year. There were more accidents causing injuries disabling workmen for more than two days during August than in any other month of 1916. The total of killed and injured for the month is 23,817, a daily average of 882. During the first eight months of this year, 1,582 workers have been killed in Pennsylvania and 166,084 injured, a monthly average of 198 and 20,760 killed and injured. Those enormous figures are based on accident reports received at the Bureau of Statistics and Information of the Department of Labor and Industry. The August accident reports, although received in greater numbers, indicated no unusual or particular causes for the increase.

In the Bureau of Workmen's Compensation, of the Labor Department, 49,552 compensation cases have been entered, of which 1,578 were fatalities and 47,974 nonfatal. Compensation agreements have been perfected for 592 of the fatal cases thus providing support for the following numbers of dependents: 418 widows, 130 parents, 1,055 children, 14 sisters, 5 brothers and one niece.

On the first day of August the amount of compensation paid for disability cases was in excess of \$450,000. The amount of compensation to be paid, in fatal cases, where agreements have been definitely made, aggregates more than \$1,300,000. The amount of compensation paid in fatal cases, to August 1, exceeded \$39,000.

While 49,552 compensation agreements were filed only 869 cases were taken before referees for settlement of disagreements. The four referees of the Philadelphia and Pittsburgh district, two in each district, handled 490 cases, while the other six referees, throughout the State, handled a total of 379 cases.

The accidents reported by months, to September 1, 1916, are as follows:

Accidents Reported to September 1, 1916.

Month	Fatal.	Total.	Daily average.
January, ...	129	13,465	518
February, ...	222	24,475	979
March, ...	239	26,971	999
April, ...	169	18,010	720
May, ...	195	18,379	735
June, ...	182	19,939	767
July, ...	200	21,028	841
August, ...	246	23,817	882
Totals, ...	1,582	166,084	810
Montbly average, ...	198	20,760	.....

*Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of April, 1916.**

Industries.	CAUSE.										NATURE OF INJURY.			
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Building construction, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paving and road construction, ...														
Plumbing and heating, ...														
Roofing and sheet metal work, ...														
Chemicals, ...														
Gas, ...														
Grease and tallow, ...														
Paints and varnishes, ...														
Powder and other explosives, ...														
Brick, ...														
Cement, ...														
Bread and other bakery products, ...														
Flour and grist mill products, ...														
Lumber and timber products, ...														
Planing mill products, ...														
Wall paper, ...														
Cotton goods, ...														
Woolen, worsted and felt goods, ...														
Automobiles and parts, ...														
Bullets, blooms and slabs, ...														
Boilers, tanks and stacks, ...														

*Note:—Similar tables for January, February and March were published in the July issue.

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of April, 1916.—Continued.

Industries.	CAUSE.										NATURE OF INJURY.				
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	
Cars, and car wheels, ...	1	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	1	1	
Castings, iron and steel, .....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	2	
Garages, making repairs, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Engines, railroad, .....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	
Forgings, iron and steel, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
Hoops, band and cotton ties, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Nails and spikes, .....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Plates, iron and steel, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
Pumps and valves, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Radiators, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Rods, steel in coils, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Safes, vaults and locks, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Tin andterne plate, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Ware, enamel and galvanized, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Sand and gravel, .....	.....	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Coal, anthracite, ...	2	9	23	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Coal, bituminous, .....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Public service, ...	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Coke, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Miscellaneous, .....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Mercantile establishments, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Municipalities, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Totals, ...	11	21	50	26	9	43	1	1	1	11	10	77	13	43	

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of April, 1916.—Continued.

Industries.	NATURE OF INJURY.				SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			Total.	COUNTIES.	Fatal Accidents by Counties.	Total.
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Females.	Single.	Married.		Industrial.	Mines.	Public service.				
Building construction, ...	1				1		1		3	1			1	Allegheny, ...	1	30
Paving and road construction, ...					1		1			1			1	Armstrong, ...	1	8
Plumbing and heating, ...					1		1			1			1	Beaver, ...	1	2
Roofing and sheet metal work, ...					1		1			1			2	Berks, ...	1	1
Chemicals, ...					1		1			1			1	Blair, ...	1	1
Gas, ...					1		1			1			1	Butler, ...	1	1
Grease and tallow, ...					1		1			1			1	Cambria, ...	1	1
Paints and varnishes, ...					1		1			1			1	Carbon, ...	1	1
Powder and other explosives, ...					1		1			1			2	Centre, ...	1	1
Brick, ...					1		1			1			1	Chester, ...	1	2
Cement, ...	1				1		1			1			1	Clarion, ...	1	1
Bread and other bakery products, ...					1		1			1			2	Clearfield, ...	1	1
Flour and grist mill products, ...					1		1			2			2	Cumberland, ...	1	1
Lumber and timber products, ...					1		1			1			1	Dauphin, ...	1	1
Planing mill products, ...					1		1			1			1	Delaware, ...	1	4
Wall paper, ...					1		1			1			1	Elk, ...	1	1
Cotton goods, ...					1		1			1			1	Fayette, ...	1	6
Woolen, worsted and felt goods, ...					1		1			1			1	Indiana, ...	1	4
Automobiles and parts, ...					1		1			1			1	Jefferson, ...	1	2
Bullets, blooms and slabs, ...					1		1			1			19	Lackawanna, ...	1	12
Boilers, tanks and stacks, ...					1		1			3			3	Lancaster, ...	1	4
Cars, and car wheels, ...					1		1			1			1	Lawrence, ...	1	1
Castings, iron and steel, ...					1		1			1			3	Lebanon, ...	1	1
Garages, making repairs, ...					1		1			1			1	Luzerne, ...	1	1
Engines, railroad, ...					1		1			1			3	McKean, ...	1	18

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of April, 1916.—Continued.

Industries.	NATURE OF INJURY.				SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			COUNTIES.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.			Single.	Industrial.	Mines.			Public service.
Forgings, iron and steel, ...					1	.....	1	.....	4	1	.....	.....	Mercer, ...	1	
Hoops, band and cotton ties, ...					1	.....	1	.....	.....	1	.....	.....	Montgomery, ...	1	
Nails and spikes, ...					1	.....	1	.....	.....	1	.....	.....	Northampton, ...	1	
Plates, iron and steel, ...					1	.....	1	.....	.....	1	.....	.....	Northumberland, ..	1	
Pumps and valves, ...					1	.....	1	.....	5	1	.....	.....	Philadelphia, ...	1	
Radiators, ...					1	.....	.....	.....	.....	1	.....	.....	Schuylkill, ...	1	
Rods, steel in coils, ...					1	.....	1	.....	.....	1	.....	.....	Somerset, ...	1	
Safes, vaults and locks, ...					1	.....	1	.....	5	1	.....	.....	Susquehanna, ...	1	
Tin andterne plate, ...					1	.....	1	.....	.....	1	.....	.....	Tioga, ...	1	
Ware, enamel and galvanized, ...					1	.....	1	.....	.....	1	.....	.....	Venango, ...	1	
Sand and gravel, ...					36	.....	25	11	56	.....	.....	.....	Warren, ...	36	
Coal, anthracite, ...				8	32	.....	21	11	43	.....	36	.....	Westmoreland, ...	32	
Coal, bituminous, ...				3	26	.....	19	7	36	.....	26	.....	York, ...	26	
Public service, ...				8	.....	.....	.....	.....	.....	1	.....	.....	.....	1	
Coke, ...					12	.....	1	8	14	13	.....	.....	.....	13	
Miscellaneous, ...							1	1	1	1	.....	.....	.....	1	
Mercantile establishments, ...					1	.....	1	.....	.....	1	.....	.....	.....	1	
Municipalities, ...							1	.....	4	.....	.....	.....	.....	1	
Totals, ...	1	.....	1	29	172	2	126	48	240	78	69	27	.....	174	

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of May, 1916.

Industries.	CAUSE.								NATURE OF INJURY.					
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Brick, cement and stone work, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Building construction, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Painting and decorating, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Roofing and sheet metal work, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chemicals, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fertilizers, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gas, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gum and gelatin, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Oils essential, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cement, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Glass—decorative, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Marble and granite work, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bread and other bakery products, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ice cream, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sugar refining, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Liquors—malt, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boxes, packing, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Woolen, worsted and felt goods, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bullets, blooms and slabs, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cars, and car wheels, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Castings, iron and steel, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of May, 1916.—Continued.

	CAUSE.										NATURE OF INJURY.			
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushed and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Industries.														
Engines, railroad, .....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Iron, pig, .....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pipes and tubing, .....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Plates, iron and steel, .....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shapes, structural, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Supplies, electrical, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Garages, making repairs, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sand and gravel, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stone, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal, anthracite, .....	.....	6	14	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal, bituminous, .....	.....	1	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public service, ...	1	2	.....	3	.....	13	.....	.....	.....	.....	.....	.....	.....	.....
Ship and boat building, .....	.....	1	.....	.....	.....	19	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous, ...	2	1	3	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mercantile establishments, ...	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Municipalities, .....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals, ...	15	21	38	19	3	51	1	1	1	7	13	62	11	47

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of June, 1916.

Industries.	CAUSE.								NATURE OF INJURY.					
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.
Electrical construction,				1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Plumbing and heating,														
Structural iron work (erecting),														
Dye-stuffs and extracts,														
Fertilizers,														
Oils, essential,														
Brick,														
Glass, window,														
Ice,														
Slaughtering and meat packing,														
Leather, tanned, curried and finished,														
Lumber and timber products,														
Paper goods, specified,														
Printing and publishing,														
Pulp goods,														
Automobiles and parts,														
Bars, iron and steel,														
Billets, blooms and slabs,														
Castings, iron and steel,														
Hardware and specialties,														
Iron, pig,														

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of June, 1916.—Continued.

Industries.	CAUSE.										NATURE OF INJURY.				
	Machinery.	Explosives, electricity, fires, hot and corrosive substances.	Falling objects.	Fall of persons.	Handling of tools and objects.	Power vehicles.	Stepping on sharp objects.	Running into or striking against sharp objects.	Poisonous substances.	Miscellaneous.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	
Radiators, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Stoves, heaters and ranges, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Tin andterne plate, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Wine products, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Stone, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Stone, crushed, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Coal, anthracite, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Coal, bituminous, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Public service, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Miscellaneous, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Hotels and restaurants, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Mercantile establishments, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Municipalities, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Warehouses, ...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Totals, ...	14	21	43	18	6	36	2	1	1	16	8	49	11	45	

Fatal Accidents by Cause, Nature of Injury, Social Condition, Counties, etc., for Month of June, 1916.—Continued.

Industries.	NATURE OF INJURY.			SEX.		SOCIAL CON- DITION.		Number of dependents.	CLASS.			COUNTIES.	Total.	
	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Male.	Female.	Married.		Single.	Industrial.	Mines.			Public service.
Stone, crushed, ...					1	.....	1	.....	2	.....	.....	Philadelphia, ...	25	
Stone, crushed, ...					1	.....	1	.....	1	.....	.....	Potter, ...	2	
Coal, anthracite, ...			1	10	39	.....	25	14	48	.....	.....	Schuylkill, ...	11	
Coal, bituminous, ...				8	26	.....	17	9	34	.....	.....	Somerset, ...	3	
Public service, ...				8	23	.....	16	7	29	.....	.....	Susquehanna, ...	1	
Miscellaneous, ...				5	10	.....	8	2	2	10	.....	Tioga, ...	1	
Hotels and restaurants, ...					1	.....	.....	1	.....	1	.....	Wayne, ...	1	
Mercantile establishments, ...				3	5	.....	.....	.....	8	5	.....	Westmoreland, ...	6	
Municipalities, ...		1	.....	2	3	.....	2	1	.....	3	.....	York, ...	2	
Warehouses, ...					1	.....	.....	.....	.....	1	.....	.....	1	
Totals, ...	1	.....	3	41	158	.....	107	51	178	68	67	.....	158	

LABOR LAWS OF PENNSYLVANIA.

BLOWER ACT OF JULY 24, 1913.

(Pamphlet Laws, page 970. No. 447.)

AN ACT

To protect the health and lives of employes in certain occupations, by requiring the use of blowers, or similar apparatus, in connection with certain kinds of machinery, and specifying the equipment to be used in connection therewith; regulating the use of such blowers and apparatus, and providing penalties for violation of this act.

Section 1. Be it enacted, &c., That all persons, companies, or corporations operating any factory or workshop where emery-wheels or emery-belts of any description are used, either solid emery, leather, leather-covered, felt, canvas, linen, paper, cotton, or wheels or belts rolled or coated with emery or corundum, or cotton-wheels used as buffs, shall provide the same with blowers, or similar apparatus, which shall be placed over, beside, or under such wheels or belts, in such a manner as to protect the person or persons using the same from the particles of dust produced and caused thereby, and to carry away the dust arising from or thrown off by such wheels or belts, while in operation, directly to the outside of the building, or to some receptacle placed so as to receive and confine such dust: Provided, That grinding machines upon which water is used at the point of the grinding contact shall be exempt from the provisions of this act; and, provided, this act shall not apply to factories or workshops where men are not employed continuously at such wheels or belts more than three hours in twenty-four hours.

Section 2. It shall be the duty of any person, company, or corporation operating any such factory, or workshop, to provide or construct such appliances, apparatus, machinery, or other things necessary to carry out the purpose of this act, as set forth in the preceding section, as follows: Each and every wheel shall be fitted with a sheet of case iron, or hood or hopper, of such form, and so applied to such wheel or wheels, that the dust or refuse therefrom will fall from such wheels, or will be thrown into such hood or hopper by centrifugal force, and be carried off by the current of air into a suction-pipe attached to same hood or hopper.

Section 3. This act shall become operative on the first day of January, one thousand nine hundred and fourteen.

Section 4. The inspectors of the Department of Labor and Industry are hereby authorized to enter and inspect all factories and workshops, for the purpose of enforcing the provisions of this act.

Section 5. Any person or persons, or company, or managers or directors of any company or corporation, who shall have the charge or management of any factory or workshop, who shall fail to comply with the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars and not exceeding three hundred dollars.

Section 6. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

CHILD LABOR ACT OF MAY 13, 1915.

(Pamphlet Laws, page 286. No. 177.)

AN ACT

To provide for the health, safety, and welfare of minors: By forbidding their employment or work in certain establishments and occupations, and under certain specified ages; by restricting their hours of labor, and regulating certain conditions of their employment; by requiring employment certificates for certain minors, and prescribing the kinds thereof, and the rules for the issuance, reissuance, filing, return, and recording of the same; by providing that the Industrial Board shall, under certain conditions, determine and declare whether certain occupations are within the prohibitions of this act; requiring that certain minors shall, during the period of their employment, attend certain schools, to be established as therein provided, and to be approved by the State Superintendent of Public Instruction, and regulating the conditions of such attendance; authorizing the State Board of Education, in certain cases, to appoint attendance officers to aid in enforcing the provisions of this act, and creating the salary and expenses of such officers a charge against the school district wherein they are employed; requiring certain abstracts and notices to be posted; providing for the enforcement of this act by the Commissioner of Labor and Industry, the attendance officers of school districts, and police officers; and defining the procedure in prosecutions thereunder, and establishing certain presumptions in relation thereto; providing penalties for the violation of the provisions thereof; and repealing all acts or parts of acts inconsistent therewith.

Section 1. Be it enacted, &c., That wherever the term "establishment" is used in this act, it shall mean any place within this Commonwealth where work is done for compensation of any kind, to whomever payable: Provided, That this act shall not apply to children employed on the farm, or in domestic service in private homes.

The term "person" when used in this act, shall be construed to include any individual, firm, partnership, unincorporated association, corporation, or municipality.

The term "week" when used in this act, shall mean any consecutive seven days.

The term "minor," when used in this act, shall mean any person under twenty-one years of age. Wherever the singular is used in this act the plural shall be included, and wherever the masculine gender is used the feminine and neuter shall be included.

Section 2. No minor under fourteen years of age shall be employed or permitted to work in, about, or in connection with, any establishment or in any occupation.

Section 3. It shall be unlawful for any person to employ any minor between fourteen and sixteen years of age, unless such minor, shall, during the period of such employment, attend, for a period or periods, equivalent to not less than eight hours each week, a school approved by the State Superintendent of Public Instruction. The school aforesaid may be conducted in the establishment where said minor is employed, or in a public school building, or in such other place, either in the district in which said minor is employed or in any joint school authorized by section eighteen hundred and one (1801) of article eighteen (18) of an act, approved May the eighteenth, nineteen hundred and eleven (1911), entitled "An act to establish a public school system in the Commonwealth of Pennsylvania, together with the provisions by which it shall be administered, and prescribing penalties for the violation thereof; providing revenue to establish and maintain the same, and the method of collecting such revenue; and repealing all laws, general, special or local, or any parts thereof, that are or may be inconsistent therewith," as the

board of school directors of the school district in which said minor is employed may designate: Provided, however, That such school shall be within reasonable access to said place of employment. Any school aforesaid shall be part of the public school system of the school district wherein said minor is employed, or of the school district or districts where said minor attends. The school hours shall not be on Saturday; nor before eight o'clock in the morning, nor after five o'clock in the afternoon, of any other day. Every person who shall employ any said minor shall notify the officer by whom the employment certificate, as hereinafter provided for the said minor, shall have been issued, within four days after said minor shall have entered his employment, of the name and location of the school at which said minor should be in attendance, and of the hours which said minor should attend said school during the continuance of said employment: Provided, That this section shall not be effective in any school district until there has been established, within said school district in which said minor is employed, or within reasonable access to said place of employment in an adjoining district, such a school.

Section 4. No minor under sixteen years of age shall be permitted to work in, about, or in connection with any establishment, or in any occupation, for more than fifty-one hours in any one week, or more than nine hours in any one day, or before six o'clock in the morning, or after eight o'clock in the evening, of any day. In computing the maximum number of hours per day or per week permitted under this act, the hours spent in school by said minor shall be considered as part of the working day or working week.

Section 5. No minor under sixteen years of age shall be employed or permitted to work in operating or assisting in operating any of the following machines, which, for the purposes of this act, are considered dangerous: Paper-lace machines, job or cylinder printing presses operated by other than foot-power; stamping machines used in sheet metal and tinware or in paper or leather manufacturing, or in washer and nut factories; metal or paper cutting machines; corrugating rolls, such as are used in making corrugated paper, or in roofing or washboard factories; dough-brakes, or cracker machinery of any description; wire or iron straightening or drawing machinery; rolling-mill machinery; power punches or shears; washing or grinding or mixing machinery; calendar-rolls in paper and rubber manufacturing, or other heavy rolls driven by power; laundering machinery; upon or in connection with any dangerous electrical machinery or appliances. Nor shall any minor under sixteen years of age be employed or permitted to work, in any capacity, in adjusting or assisting in adjusting any belt to any machinery, or in proximity to any hazardous or unguarded belts, machinery, or gearing, while the same is in motion; nor on scaffolding; nor in heavy work in the building trades; nor in stripping, assorting, or manufacturing tobacco; nor in any tunnel; nor in a public bowling-alley; nor in a pool or billiard-room; nor in the manufacture of paints, colors, or white-lead; nor in any capacity in preparing compositions in which dangerous leads or acids are used; nor in the manufacture or use of dangerous or poisonous dyes; nor

upon any railroad, steam, electric or otherwise; nor upon any boat engaged in the transportation of passengers or merchandise; nor in operating motor-vehicles of any description; nor in any anthracite or bituminous coal-mine, or in any other mine; nor about blast-furnaces; nor in or about any distillery, brewery, or any establishment where alcoholic liquors are manufactured or bottled.

No minor under eighteen years of age shall be employed or permitted to work in the operation or management of hoisting machines, in oiling or cleaning machinery, in motion; in the operation or use of any polishing- or buffing-wheel; at switch-tending, at gate-tending, at track-repairing; as a brakeman, fireman, engineer, or motorman or conductor, upon a railroad or railway; as a pilot, fireman, or engineer upon any boat or vessel; in or about establishments wherein gunpowder, nitro-glycerine, dynamite, or other high or dangerous explosive, is manufactured or compounded; as a chauffeur of an automobile or an aeroplane.

No minor shall be employed or permitted to work in, or in connection with, any saloon or bar-room where alcoholic liquors are sold.

In addition to the foregoing, it shall be unlawful for any minor under eighteen years of age to be employed or permitted to work in any other occupation dangerous to the life or limb, or injurious to the health or morals, of the said minor, as such occupations shall, from time to time, after public hearing thereon, be determined and declared by the Industrial Board of the Department of Labor and Industry: Provided, That if it should be hereafter held by the courts of this Commonwealth that the power herein sought to be granted to the said board is for any reason invalid, such holding shall not be taken in any case to affect or impair the remaining provisions of this section.

Section 6. No minor shall be permitted to work as messenger for a telephone, telegraph, or messenger company, in the distribution, collection, transmission, or delivery of goods or messages, before six o'clock in the morning or after eight o'clock in the evening of any day.

Section 7. No male minor under twelve years of age, and no female minor, shall distribute, sell, expose, or offer for sale any newspaper, magazine, periodical, or other publication, or any article of merchandise of any sort, in any street or public place. No male minor under fourteen years of age, and no female minor, shall be suffered, employed, or permitted to work at any time as a scavenger, bootblack, or in any other trade or occupation performed in any street or public place. No male minor under sixteen years of age, and no female minor, shall engage in any occupation mentioned in this section before six o'clock in the morning, or after eight o'clock in the evening, of any day.

Section 8. Before any minor under sixteen years of age shall be employed, permitted, or suffered to work in, about, or in connection with, any establishment, or in any occupation, the person employing such minor shall procure and keep on file, and accessible to any attendance officer, deputy factory inspector, or other authorized inspector or officer charged with the enforcement of this act, an employment certificate as hereinafter provided, issued for said minor.

Section 9. Employment certificates shall be issued only by the following officials, for children residing within their respective public school districts: In public school districts having a district superintendent or supervising principal, by such superintendent or supervising principal; in school districts having no district superintendent or supervising principal, by the secretary of the board of school directors of that district: Provided, That any district superintendent, supervising principal, or secretary of the board of school directors, hereby authorized to issue such certificates, may authorize and deputize, in writing, any other school official to act in his stead for the purpose of issuing such certificates. All employment certificates shall be forwarded by mail, by the issuing officer to the prospective employer of the minor for whom the employment certificate is issued.

Section 10. Application for the employment certificate must be made, in person, by the parent, guardian, or legal custodian of the minor for whom such employment certificate is requested; or, if said minor have no parent, guardian, or legal custodian, then by the next friend, who must be over twenty-one years of age; and no employment certificate shall be issued until the said minor has personally appeared before, and been examined by, the officer issuing the certificate.

Section 11. Employment certificates shall be of two classes,—general employment certificates and vacation employment certificates. General employment certificates shall entitle the minor, fourteen to sixteen years of age, to work during the entire year. Vacation employment certificates shall entitle the minor, fourteen to sixteen years of age, to work on any day, except on such days as such minor is required to attend school, under the provisions of the laws now in force or hereafter enacted.

Section 12. The official authorized to issue a general employment certificate shall not issue such certificate until he has received, examined, approved, and filed the following papers, namely: —

a. A statement signed by the prospective employer, or by some one duly authorized on his behalf, stating that he expects to give such minor present employment, and setting forth the character of the same, and the number of hours per day and per week which said minor will be employed;

b. A school record, as hereinafter provided;

c. A certificate of physical fitness, as hereinafter provided;

d. Proof of age, as hereinafter provided.

Section 13. For the issuance of a general employment certificate, the school record required by this act shall be filled out and signed by the principal of the school which the minor has last attended, or by some one duly authorized by him; and shall be furnished to any minor who may be entitled thereto. It shall certify that the said minor has completed a course of study equivalent to six yearly grades of the public school, in the English language, spelling, reading, arithmetic, geography, and history of the United States. Such school record shall also give the full name, date of birth, and residence of minor, and the name and residence of the parent, guardian, or custodian, as shown in the records of the school.

Section 14. The certificate of physical fitness required by this act shall be signed by a physician, approved by the board of school directors of the school district in which said minor resides, and shall state that the said minor has been thoroughly examined by the said physician at the time of the application for an employment certificate, and is physically qualified for the employment specified in the statement of the prospective employer. In any case where the said physician shall deem it advisable, he may issue a certificate of physical fitness for a limited time; at the expiration of which time the holder shall again appear, and submit to a new examination, before being permitted to continue at work.

Section 15. The evidence of age required by section twelve of this act shall consist of one of the following proofs of age, which shall be required in the order herein designated:—

a. A duly attested transcription of the birth certificate, filed according to law, with a registrar of vital statistics, or other officer charged with the duty of recording birth; or,

b. A baptismal certificate or transcript of the record of baptism, duly certified, and showing the date of birth; or,

c. A passport showing the age of the immigrant; or,

d. In case none of the aforesaid proofs of age shall be obtainable, and only in such case, the issuing officer may accept, in lieu thereof, any other documentary record of age (other than a school record or an affidavit of age), or transcript thereof, duly certified, which shall appear to the satisfaction of the issuing officer to be good and sufficient evidence of age; or,

e. In case none of the aforesaid proofs of age shall be obtainable, and only in such case, the issuing officer may accept, in lieu thereof, the signed statement of the physician, approved by the board of school directors, stating that, after examination, it is the opinion of such physician that the minor has attained the age required by law for the occupation in which he expects to engage. Such statement shall be accompanied by an affidavit, signed by the minor's parent, guardian, or custodian, or, in case he shall have no parent, guardian, or custodian, by his next friend, certifying to the name, date, and place of birth of the minor, and that the parent, guardian, custodian, or next friend, signing such statement, is unable to produce any of the proofs of age specified in the preceeding subdivisions of this section.

Section 16. The official authorized to issue a vacation employment certificate shall not issue such certificate until he shall have received and filed the following papers, duly executed, namely:—

a. A statement signed by the prospective employer, or by someone duly authorized on his behalf, stating that he expects to give such minor present employment, and setting forth the character of the same, and the number of hours per day and per week which said minor will be employed;

b. A certificate of physical fitness, as provided in section fourteen of this act;

c. Evidence of age, showing that the said minor is fourteen years of age or upwards, which evidence of age shall be of similar character to the evidence heretofore specified in section fifteen of this act.

Section 17. It shall be the duty of every person who shall employ any minor under sixteen years of age to acknowledge, in writing, to the official issuing the same, the receipt of the employment certificate of said minor, within three days after the beginning of such employment. On termination of the employment of a minor under sixteen years of age, the employment certificate issued for such minor shall be returned by mail, by the employer, to the official issuing the same, immediately upon demand of the minor for whom the certificate was issued, or, otherwise, within three days after termination of said employment. The official to whom said certificate is so returned shall file said certificate and preserve the same. Any minor whose employment certificate has been returned; as above provided, shall be entitled to a new employment certificate upon presentation of a statement from the prospective employer, as hereinabove provided, accompanied by a certificate of physical fitness, issued in the manner hereinabove provided and based upon a re-examination of said minor, and certifying that the minor is physically able to undertake the work for which the new employment certificate is to be issued.

Section 18. All employment certificates shall be issued on forms supplied by the State Superintendent of Public Instruction, and shall contain the name and address of the prospective employer, and the nature of the occupation in which said minor is expected to engage; and no certificate shall be valid excepting in the hands of the employer so named, and for the occupations so designated; and shall state the name, sex, date, and place of birth, place of residence, color of hair and eyes, and any distinguishing physical characteristics of the minor for whom it shall be issued. It shall certify that the minor named has personally appeared before the issuing officer, and has been examined; and that all the papers required by law have been duly examined, approved and filed; and that all the conditions and requirements for issuing an employment certificate have been fulfilled. Every certificate shall be signed, in the presence of the issuing officer, by the minor for whom it shall be issued. The certificate shall bear a number, shall show the date of its issue, and shall be signed by the issuing officer. Vacation employment certificates shall be of a color different from the general employment certificates, and shall bear across their face the legend "Vacation Employment Certificate."

Section 19. Whenever a certificate shall be refused to any minor, the school record issued to such minor shall be forwarded, by the official refusing to issue the certificate, to the principal of the school which said minor shall attend, or to the compulsory attendance officer.

Section 20. Whenever the State Superintendent of Public Instruction cannot secure effective enforcement of the foregoing provisions of this act, in any school district, he is hereby authorized and required to report that fact to the State Board of Education. In such case the State Board of Education is authorized and required to secure such enforcement by appointing attendance officers in such districts. The salary and expenses of such attendance officers shall be a charge against said district where said attendance officers are actually employed, and shall be deducted from any State moneys appropriated to said district for school purposes.

Section 21. It shall be the duty of every person who shall employ any minor, under the age of sixteen years, to post and keep posted, in a conspicuous place in every establishment wherein said minor is employed, permitted or suffered to work, a printed copy of the sections of this act relating to the hours of labor, and a list or lists of all minors employed under the age of sixteen years. Such copies of the sections of this act and blanks for compliance with the provisions shall be prepared by the Department of Labor and Industry, and be furnished by it on application of such employer. Every person employing minors under sixteen years of age shall furnish the employment certificates and lists, provided for in this act, for inspection, to attendance officers, factory inspectors, or other authorized inspectors or officers charged with the enforcement of this act.

Section 22. Whenever any minor shall be employed or permitted to work in any establishment or at any occupation, who, in the judgment of any officer charged with the enforcement of this act, is under the legal age for such work, or is working at a time forbidden by law for such minor; or whenever any minor shall be employed or permitted to work in, or in connection with, any establishment, who, in the judgment of any officer charged with the enforcement of this act, is under sixteen years of age, and for whom the person employing or permitting such minor to work shall not have on file an employment certificate; such officer may demand from the person employing or permitting such minor to work that he shall either furnish to such officer, within ten days, evidence of age, as defined in section fifteen of this act, that such minor is in fact of legal age for the work in which he is engaged, or over, or sixteen years of age or over, as the case shall be, or shall cease to employ or permit such minor to work as aforesaid: Provided, That such person, by thus ceasing to employ or permit such minor to work, shall not be relieved from any of the fines or penalties provided in this act for the employment or work of a minor contrary to law. In case such person shall fail to furnish to said officer, within ten days after the making of such demand, the required evidence of age, and shall thereafter employ such minor or permit him to work as aforesaid, proof of the making of such demand and of failure to produce the evidence required shall be prima facie evidence of the illegal employment of such minor, in any prosecution brought therefor.

Section 23. Any person, or any agent or manager for any person, who shall violate any of the provisions of this act, or who shall compel or permit any minor to violate any of the provisions of this act, or who shall hinder or delay any officer in the performance of duty in the enforcement of this act, shall, upon conviction thereof, be sentenced to pay a fine of not less than ten (\$10.00) dollars nor more than two hundred (\$200.00) dollars, or to undergo an imprisonment of not more than ten days, or both, at the discretion of the court.

Section 24. It shall be the duty of the Commissioner of Labor and Industry, the attendance officers of the various school districts, and the police of the various cities, boroughs, and townships of this Commonwealth, to enforce the provisions of this act. Prosecutions for violations of this act may be instituted by any factory inspector,

attendance officer, or police officer, upon oath or affirmation. All prosecutions for violations of this act shall be in the form of a summary criminal proceedings, instituted before a magistrate, alderman, or justice of the peace within a school district wherein the offense was committed. Upon conviction, after a hearing, the sentences provided in this act shall be imposed. All fines collected under this act shall be paid into the State Treasury, for the use of the Commonwealth.

Section 25. All acts or parts of acts inconsistent herewith be, and the same are hereby, repealed.

Section 26. This act shall take effect on the first day of January, Anno Domini nineteen hundred and sixteen (1916).

DEPARTMENT OF LABOR AND INDUSTRY GENERAL DEPARTMENT ACT OF JUNE 2, 1913.

ADMINISTRATIVE DETAILS OMITTED
(Pamphlet Laws, page 396. No. 267.)

AN ACT

Creating a Department of Labor and Industry; defining its powers and duties; establishing an Industrial Board; providing for the appointment of a Commissioner of Labor, inspectors, statisticians, clerks, and others to enforce the provisions of this act, and providing salaries for the same; prescribing a standard of reasonable and adequate protection to be observed in the rooms, buildings, and places where labor is employed; empowering the said Industrial Board to make, alter, amend, and repeal rules and regulations relating thereto; transferring the powers and duties of the Department of Factory Inspection to the Department of Labor and Industry, and abolishing the Department of Factory Inspection; and providing a penalty for the violation of the provisions of this act, or the rules and regulations of the said board.

Section 1. Be it enacted, &c., That there is hereby established a Department of Labor and Industry, the head of which shall be a Commissioner of Labor and Industry, who shall be appointed by the Governor, by and with the consent of the Senate, and who shall hold office for the term of four years from the date of his appointment, and who . . . shall appoint, and may at pleasure remove, all officers, clerks, and other employes of the Department of Labor and Industry, except as herein otherwise provided.

Section 2. The Commissioner of Labor and Industry shall forthwith appoint, upon entering upon the duties of his office, one Chief Inspector of the Department of Labor and Industry, . . . who shall, during the absence or disability of the Commissioner of Labor and Industry, possess all the powers and perform all the duties of the said commissioner, except the power to make appointments, and who, in addition to his duties prescribed by this act, shall perform such other duties and possess such other powers as the Commissioner of Labor and Industry shall prescribe.

Section 3—omitted.

Section 4. The Department of Labor and Industry shall be divided into three bureaus, as follows:—

1. Bureau of Inspector;
2. Bureau of Statistics and Information;
3. Bureau of Arbitration,—

together with such other bureaus as the Commissioner of Labor and Industry may deem necessary, and shall, with the consent of the Governor, from time to time, established.

[See also Act of June 4, 1915, hereafter, creating Bureau of Employment].

Section 5. The Commissioner of Labor and Industry shall establish and maintain branch offices in the cities of Philadelphia and Pittsburgh, and in such other cities of the Commonwealth as he may deem advisable. Such branch offices shall, subject to the supervision and direction of the Commissioner of Labor and Industry, be in immediate charge of such officers or employees as the said Commissioner may designate; and the reasonable and necessary expenses of such offices shall be paid as are the other expenses of the Department of Labor and Industry.

Sections 6 and 7—omitted.

Section 8. The Commissioner of Labor and Industry shall, from time to time, divide the State into districts; and shall assign to such districts such inspectors and supervising inspectors as may, in his judgment, appear expedient; and shall, from time to time, assign and transfer such inspectors from one district to any other district, or to special duty in any bureau of the said department; and may assign an inspector to inspect any special class of factories or establishments, and may assign one or more of them to act as clerks in any office of the department.

The Commissioner of Labor and Industry shall visit and inspect, or cause to be visited and inspected, during reasonable hours and as often as practicable, every room, building, or place, where and when any labor is being performed which is affected by the provisions of any law of this Commonwealth or of this act, and shall cause to be enforced therein the provisions of all such existing laws and of this act, and the rules and regulations of the Industrial Board hereinafter provided for.

The Commissioner of Labor and Industry and all inspectors may, in the discharge of their duties, enter any such place, building, or room, whenever they have reasonable cause to believe that any such labor is being or will be performed therein.

Section 9. The inspectors of the third grade shall, together with the Chief Medical Inspector, hereinabove provided for, inspect all rooms, buildings, and other places subject to the provisions of this act, throughout the State, with respect to the conditions of work affecting the health of persons employed therein, and shall perform such other duties and render such other service as the Commissioner of Labor and Industry shall direct.

Section 10. The inspectors of the fourth grade shall constitute a division of industrial hygiene, which shall be under the immediate charge of the Commissioner of Labor and Industry. The members of the division of industrial hygiene shall make special inspections of factories and mercantile establishments, and all rooms, buildings or other places subject to the provisions of this act; and shall conduct special investigations, throughout the Commonwealth of Penn-

sylvania, relative to industrial processes and conditions. The members of such division shall prepare material for leaflets and bulletins, calling attention to dangers in particular industries and the precautions to be observed to avoid them, and shall perform such other duties and render such other services as may be required by the Commissioner of Labor and Industry. Each member of said division shall make an annual report to the Commissioner of Labor and Industry, which shall be transmitted to the Legislature as part of the annual report of said Commissioner.

Bureau of Statistics and Information.

Section 11. It shall be the duty of said bureau to keep in touch with labor in the Commonwealth, especially in relation to commercial, industrial, physical, educational, social, moral, and sanitary conditions of wage-earners of the Commonwealth, and to the productive industries thereof; also, to collect, assort, publish, and systematize the details and general information regarding industrial accidents and occupational diseases, their causes and effects, and the methods of preventing and remedying the same, and of providing compensation therefor; also, to make inquiry and investigation into the condition, welfare, and industrial opportunities of all aliens arriving and being within the State, and to gather information with respect to the supply of labor afforded by such aliens, and ascertain the occupations for which such aliens may be best adapted, and to bring about communication between the aliens and the several industries requiring labor; and to collect, assort, and publish statistical details and general information relative thereto.

The chief, or duly authorized deputy, shall have power to issue subpoenas, administer oaths, and take testimony in all matters relating to the duties herein required of said bureau. Any corporation, firm, or individual doing business within the Commonwealth, who shall neglect or refuse for thirty days to answer questions by circular or upon personal application, or who shall refuse to obey the subpoena and give testimony according to the provisions of this act, shall be liable to a penalty of one hundred dollars, to be collected by order of the Commissioner of Statistics in an action of debt, in which the Commonwealth of Pennsylvania shall be plaintiff. This bureau shall also be required to collect, compile, and publish annually, the productive statistics of manufacturing, commercial, and other business interests of the state.*

[See also Act of June 1, 1915, hereafter, creating Division of Municipal Statistics].

Industrial Board.

Section 12. There is hereby created and established in the Department of Labor and Industry an Industrial Board, to consist of the Commissioner of Labor and Industry, and four additional members, to be appointed by the Governor, by and with the consent of the Senate,—one of whom shall be an employer of labor, one a wage-earner, and one a woman. The said additional members shall be designated by the Governor to serve until the first day of January in the years one thousand nine hundred and fifteen, one thousand nine hundred and sixteen, one thousand nine hundred and

seventeen, and one thousand nine hundred and eighteen, respectively. Upon the expiration of each of the said terms, the term of office of each associate member thereafter appointed shall be four years, from the first of January. The Commissioner of Labor and Industry shall be the chairman of the said board. Vacancies shall be filled by appointment, for an unexpired term, in the same manner as provided for the appointments of the previous holders of the office in which said vacancy occurs.

The Commissioner of Labor and Industry shall receive no additional compensation for services as member of the said board. . . .

The board shall appoint, and may remove, a secretary, who shall receive a salary to be fixed by the board. The Commissioner of Labor and Industry shall detail, from time to time, to the assistance of said board, such employees of the Department of Labor and Industry as the board may require. In aid of its work, the said board is empowered to employ experts for special and occasional services. The counsel to the Department of Labor and Industry shall act as counsel to the board, without additional compensation.

The board shall hold stated meetings, which shall be open to the public, at least once a month during the year, and shall hold other meetings at such times and places as may be necessary. Such meetings shall be called by the chairman or majority of the board. The board shall keep minutes of its proceedings, showing the vote of each member upon every question, and records of its examination and other official action.

Section 13. The Industrial Board shall have the power to make investigations concerning, and report upon, all matters touching the enforcement and effect of the provisions of all laws of the Commonwealth, the enforcement of which shall now and hereafter be imposed upon the Department of Labor and Industry, and the rules and regulations made by the Industrial Board in connection therewith; and to subpoena and require the attendance in this Commonwealth of all witnesses, and the production of books and papers pertinent to the said investigation, and to examine them and such public records as it may require in relation to any matter which it has power to investigate. Any witness who refuses to obey a subpoena of the said board, as hereinabove provided for, or who, refuses to be sworn or to testify, or who fails or refuses to produce any books, papers, or documents touching any matter under investigation or examination by the said board, or who is guilty of any contempt after being summoned to appear before the said board as above provided, may be punished as for contempt of court; and, for this purpose, application may be made to any court within whose territorial jurisdiction the said contempt took place, and for which purpose the courts of the common pleas of this Commonwealth are hereby given jurisdiction. In the course of such investigation each member of said board shall have power to administer oaths. Each member shall have the further power to make personal investigations of all establishments in this Commonwealth where labor is employed.

Section 14. All rooms, buildings, and places in this Commonwealth where labor is employed, or shall hereafter be employed, shall be so constructed, equipped, and arranged, operated and con-

ducted, in all respects, as to provide reasonable and adequate protection for the life, health, safety, and morals of all persons employed therein. For the carrying into effect of this provision, and the provisions of all the laws of this Commonwealth, the enforcement of which is now or shall hereafter be entrusted to or imposed upon the Commissioner or Department of Labor and Industry, the Industrial Board shall have power to make, alter, amend, and repeal general rules and regulations necessary for applying such provisions to specific conditions, and to prescribe means, methods, and practices to carry into effect and enforce such provisions.

Section 15. The rules and regulations of the Industrial Board, and the amendments and alterations thereof, may embrace all matters and subjects to which power and authority of the Department of Labor and Industry extends, and shall be distributed to all applicants. Every rule or regulation adopted by the board shall be promptly published in bulletins of the Department of Labor and Industry, and in such daily newspapers as the board may prescribe, and no such rule or regulation shall take effect until thirty days after such publication. Any employer, employe, or other person interested, either because of ownership in or occupation of any property affected by any such order or regulation, or otherwise, may petition for a hearing on the reasonableness of a rule or regulation. Such petition for hearing shall be by verified petition, filed with the said Industrial Board, setting out specifically and in full detail the rule or regulation upon which a hearing is desired, and the reasons why such rule or regulation is deemed to be unreasonable. All hearings of the board shall be open to the public. Upon receipt of such petition, if the issues raised in such petition have theretofore been adequately considered, the Industrial Board shall determine the same by confirming, without hearing, its previous determination; or, if such hearing is necessary to determine the issue raised, the Industrial Board shall order a hearing thereon, and consider and determine the matter or matters in question at such time as shall be prescribed. Notice of the time and place of such hearing shall be given to the petitioner, and to such other persons as the Industrial Board may find directly interested in such decision.

Section 16. Every person who violates any of the provisions of this act, or any of the rules or regulations of the Industrial Board, or who resists or interferes with any officer or agent of the Department of Labor and Industry in the performance of his duties in accordance with the said rules and regulations, shall be deemed guilty of a misdemeanor; and shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars (\$100.00), or by imprisonment not exceeding one month, or both, at the discretion of the court.

Section 17. There shall be created in the Department of Labor and Industry a Bureau of Mediation and Arbitration, the head of which shall be a chief of bureau. . . .

Section 18. Whenever a difference arises between an employer and his employes, which cannot be readily adjusted, the chief of the bureau shall proceed promptly to the locality thereof, and endeavor

by mediation to effect an amicable settlement of the controversy. If such settlement cannot be effected, the dispute may be arbitrated by a board composed of one person selected by employer, and one person selected by employes, and a third who shall be selected by the representatives of the employer and the employes; and such third member of the board shall be selected and appointed within a period of five days after the matter has been submitted for arbitration, and, in the event of any such appointment or selection not being made within a period of five days, then the Chief of the Bureau of Mediation and Arbitration shall constitute the third member of the board, and be the chairman of the board; and if such third representative is chosen, by the two representatives of the employer and employe, within five days, then a chairman of the board shall be established by the board itself. A submission to the board shall be made in writing, and the parties thereto shall agree to abide by the determination of the board. Said board shall render a written decision within ten days after the completion of the investigation, one copy thereof to be filed in the bureau, and a copy to be furnished each party to the controversy. The chief of the bureau shall make an annual report of his work, containing such information as the Commissioner of Labor and Industry may request.

Section 19. The Commissioner of Labor and Industry may assign to this bureau, from his department, such clerical assistance as, from time to time, he may think necessary.

Section 20. In addition to their respective salaries, as hereinabove provided, the commissioners, inspectors, and other officers of the Department of Labor and Industry, shall receive the expenses actually and necessarily incurred in the performance of their official duties; which expenses, together with all other necessary expenses under the provisions of this act, shall, after the approval in writing by the Governor and the Commissioner of Labor and Industry, be paid by the State Treasurer, upon warrant of the Auditor General, in the manner now provided by law.

Section 21. Upon requisition of the Commissioner of Labor and Industry, the Board of Public Grounds and Buildings shall furnish suitable accommodations in the State Capitol building for the use of this department.

Section 22. Upon requisition of the Commissioner of Labor and Industry, and order of the Superintendent of Public Printing and Binding, the State Printer shall do the printing and binding necessary for the proper performance of the duties of this department.

Section 23. All of the powers and duties now by law vested in and imposed upon the Department of Factory Inspection, which is hereby abolished, are now hereby vested in the Department of Labor and Industry.

Section 24. This act shall take effect on and after the first day of June, one thousand nine hundred and thirteen.

Section 25. All acts or parts of acts inconsistent herewith be and the same are hereby repealed.

DEPARTMENT OF LABOR AND INDUSTRY
ACT OF JUNE 4, 1915, CREATING DIVISION OF MUNICIPAL
STATISTICS.

ADMINISTRATION DETAILS OMITTED
(Pamphlet Laws, page 689. No. 314)

AN ACT

Creating a Division of Municipal Statistics and Information in the Department of Labor and Industry, and fixing the compensation of officers and employes therein.

Section 1. Be it enacted, &c., That the Commissioner of Labor and Industry is hereby authorized to establish in said department, in the Bureau of Statistics and Information, a Division of Municipal Statistics and Information. The said division shall gather, classify, index, and make available statistical and other information, from any and every source, that may be helpful in improving the methods of administration in the several municipalities of the Commonwealth.

Section 2. The Commissioner of Labor and Industry is hereby authorized to employ a municipal statistician, who, in his judgment, shall be qualified to perform the duties herein described, ... and a stenographer and typewriter to assist said statistician in the performance of his duties, ...

Section 3. It is hereby made the duty of every city or borough official to furnish such information as may be requested by the chief of the Bureau of Statistics and Information, or his duly authorized deputy.

DEPARTMENT OF LABOR AND INDUSTRY
ACT OF JUNE 4, 1915, CREATING BUREAU OF EMPLOYMENT.

ADMINISTRATION DETAILS OMITTED
(Pamphlet Laws, page 833. No. 373.)

AN ACT

Establishing under the Department of Labor and Industry a system of regulation of employers seeking employes and of persons seeking employment; and prescribing, as incidental thereto, certain duties of employers, and of county, municipal, townships, and school authorities, and of agencies procuring employes for others; and prescribing penalties.

Definitions.

Section 1. Be it enacted, &c., That the term "bureau," as used in this act, shall mean Bureau of Employment.

The term "commissioner" shall mean the Commissioner of Labor and Industry.

The term "board" shall mean the Industrial Board of the Department of Labor and Industry.

The term "local offices" shall mean local, free, public employment offices.

Bureau of Employment.

Section 2. A Bureau of Employment shall be established in the Department of Labor and Industry. The central office of the bureau shall be located in the city of Harrisburg.

Director.

Section 3. The commissioner shall appoint a director, who shall be subject to the direction and supervision of the commisisoner.

Sections 4 and 5—omitted.

Powers and Duties of the Director.

Section 6. The director shall bring into communication employers seeking employes and persons seeking employment; prescribe rules and regulations for the administration and operation of all public and private employment offices; investigate the circulation of information and statements regarding employment and labor conditions, for the purpose of preventing fraud and improper practices; ascertain the extent and causes of unemployment and the remedies therefor; devise and recommend (in the form of bills, or otherwise) means and methods for the prevention of unemployment and distress from involuntary idleness; and co-operate with any person or authority whatsoever in carrying out the full intent and purposes of this act.

Sections 7, 8 and 9—omitted.

District Branch Offices.

Section 10. The State may be divided into districts, and district branch offices may be established by the commissioner as he may deem necessary and advisable.

Local, Free, Public Employment Offices.

Section 11. The director may enter into an agreement with any county, city, borough, town, or township for the establishment and joint maintenance of local offices. All county, city, borough, town, or township executives shall report to the director, from time to time, the general conditions of employment, the demands of employers for employes, the demands of employes for employment, and the existence of industrial disputes, strikes, and lock-outs, in their respective districts, and shall cause to be posted any bulletins or notices of the bureau pertaining to the purposes of this act. Any county, city, borough, town, or township may appoint the superintendent of the nearest district branch office to fill the office of superintendent of employment.

Powers and Duties of the Industrial Board.

Section 12. The board shall,—

(a) Devise plans and take steps toward the regularization of employment in the industries and seasonal trades of the State.

(b) Investigate the feasibility of, and induce the State, counties, cities, boroughs, towns, and townships to undertake, public improvements during the periods of unemployment.

(c) Co-operate with any persons, employer, official, association, or organ of the press whatsoever, for the accomplishment of the aforesaid purposes; appoint sub-committees for juveniles, farm laborers, and for other purposes; and the membership of these sub-committees may be enlarged to include persons outside the board, but each sub-committee must be presided over by a member of the board.

Representative Councils.

Section 13. Each district and local office shall have a representative council, appointed by the commissioner. The council shall consist of six members, one of whom shall be a woman, and all of whom are citizens of the United States and of the State, and residents of the district where the council is to serve. One member shall be an employer, not a member of any employers' association; two members shall be representatives of employers' organizations; one member shall be a working person, not a member of any organization of working people, and two shall be representatives of organizations of working people. The commissioner shall designate one from the employers and one from the employes, to serve for a period of two years; one from each group, to serve for a period of four years; and one from each group, to serve for a period of six years. Upon the expiration of said terms, the term of office of each member thereafter appointed shall be for a term of six years, except that any member appointed to fill a vacancy shall serve for the unexpired term thereof.

The commissioner and the director shall be ex-officio members of each council. The superintendent in charge of a district shall be chairman of the council for his district, and in case of his inability to be present at any meeting the director or the commissioner may act as chairman.

The actual and necessary traveling expenses incurred by members of district representative councils, while engaged in the performance of their duties, shall be paid by the State.

Duties of Councils.

Section 14. The council in each district shall,—

(a) Devise methods and take steps toward the regularization of employment in the various industries and seasonal trades of the district.

(b) Devise plans and take steps to promote public improvements by municipalities within the district, during seasons of unemployment.

(c) Co-operate with any person, employer, association, or organ of the press in accomplishing the aforesaid purposes.

(d) Appoint sub-committees to deal specially with any subject which the council has power to investigate or act upon, but each sub-committee shall be presided over by a member of the council.

(e) Hold meetings at least once each month, or oftener if required, for the accomplishment of the aforesaid purposes; such meetings to be called by the chairman of the council, or to be fixed at any regular meeting of the council.

(f) Keep minutes of all meetings; submit copy of all minutes, records, and decisions; and report in full on all actions or proceedings to the director. No rule shall be prescribed or action taken by the council inconsistent with the action of the board.

Free Services.

Section 15. The bureau shall neither charge nor receive fees, directly or indirectly, for any service or benefit rendered to those availing themselves of advantages provided. No official, employe, or person associated with the bureau in the performance of its duties shall charge, demand, accept, or receive, directly or indirectly, any fee, compensation, contribution, or gratuity for any service or duty performed as an official or employe of the bureau.

Industrial Disputes, Strikes, Lock-outs, Et Cetera.

Section 16. Each person applying for employes at any public employment office shall file, in such form and manner as the director may require, a signed statement affirming or denying the existence of an industrial dispute, strike, or lock-out at or in connection with the business or place of business for which such person is applying for help. Any citizen or employe may file at any public employment office a signed statement with regard to the existence of an industrial dispute, strike, or lock-out affecting any business or trade. Each statement filed shall be exhibited in the public employment office, but not until it has been communicated to the employes affected if filed by employers, or to the employers affected if filed by citizens or employes. In case a reply to such a statement is received, it shall be exhibited together with the original statement, in the public employment office; but no statement or reply thereto shall be so exhibited until it has been ascertained, upon investigation, that an industrial dispute, strike, or lockout does exist, at or in connection with the business or place of business in question. No official of the bureau shall assist, in any manner whatsoever, any person, firm, association, or corporation who is a party to an industrial dispute, strike, or lock-out. Each person applying to any public employment office for help or employment shall give such information as the director may require.

Full Information.

Section 17. It shall be the duty of the officer in charge of each public employment office, and of his assistants, to give full and complete information with regard to any position offered, and the terms and conditions relative thereto, to any person applying for such position; and to call the attention of such applicant to any statement, or reply thereto, with reference to the existence of any industrial dispute, strike, or lock-out affecting the business or trade in which the position is offered.

Discrimination.

Section 18. No applicant for employment shall suffer any disqualification, or be otherwise prejudiced, at any public employment office on account of refusing to accept employment offered. The reliability and fitness of an applicant for the particular position which he is to fill shall always be taken into consideration in referring him to an employer. No applicant procuring employment with any employer other than the State, through the medium of the bureau or its officials, shall be regarded in any sense as an employe or official of the State.

Juveniles.

Section 19. In case bureaus for vocational training and placement, or other similar byureaus, are established by local school authorities, the director shall co-operate with such bureaus in dealing with the employment of children between the ages of fourteen and eighteen years, in such manner as may be advisable. The director shall use all reasonable means to promote the establishment of bureaus for vocational training and placement, in connection with vocational education by public school authorities throughout the State. Until bureaus for vocational training and placement, or other similar bureaus, have been established by local public school authorities, for the purposes of directing, advising, and assisting children in the selection of suitable vocations, the director shall provide school principals and all public employment offices with special blank forms for the registration of all children having employment certificates, as required by law, and leaving school lawfully in search of employment. Each child applying for employment may register at a public or other approved school with the principal of such school; and the principals of public or other approved schools are hereby authorized and required to register such applications for employment, to assist and advise each applicant in the selection of a vocation, in such manner as may be necessary, and to transmit immediately to the superintendent of the district branch office all applications for employment registered. The superintendent of each public employment office shall co-operate with the school principals in his district in endeavoring to secure suitable positions for children leaving school lawfully to enter a vocation, and shall guide and induce minors to enter promising vocations; and each principal shall acquaint the teachers and pupils of his school with the purpose and functions of the public employment office in placing juveniles.

Permit for Free Employment Agencies.

Section 20. No provision of any section of this act shall be construed as applying to agents procuring employment for school teachers exclusively; nor to registries of any incorporated association of nurses; nor to departments or bureaus maintained by persons, firms, or corporations or associations, for the purpose of obtaining help for themselves, where no fee is charged the applicant for employment.

Untrue Statements.

Section 21. Any person wilfully making any untrue statement in applying to any public employment office shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding six months, or both, at the discretion of the court.

Penalties.

Section 22. Except as herein provided otherwise, any person who violates any of the provisions of this act shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not more than one hundred dollars, or by imprisonment not exceeding one year, or both, at the discretion of the court.

DEPARTMENT OF LABOR AND INDUSTRY EMPLOYMENT ACT OF JUNE 7, 1915. (Pamphlet Laws, page 888. No. 397.)

AN ACT

Regulating, through the Commissioner of Labor and Industry, the business of assisting employers to obtain employes, and persons to secure employment, including the business of collecting information to the same end, and prescribing penalties.

Employment Agents.

Section 1. Be it enacted, &c., That no employment agent shall hereafter conduct business for profit unless licensed to do so in accordance with the provisions of this act.

Definitions.

Section 2. The term "employment agent," as used in this act, shall mean every person, co-partnership, association or corporation engaged in the business of assisting employers to secure employes, and persons to secure employment, or of collecting and furnishing information regarding employers seeking employes, and persons seeking employment: Provided, That no provision of any section of this act shall be construed as applying to agents procuring employment for school teachers exclusively; nor to registries of any incorporated association of nurses; nor to departments or bureaus maintained by persons, firms, or corporations or associations, for the purpose of obtaining help for themselves, where no fee is charged the applicant for employment.

The term "employment office" shall mean every office or place where the business of an employment agent is carried on.

The term "commissioner" shall mean the Commissioner of Labor and Industry.

Application for License.

Section 3. Application for a license may be made in person or by mail to the commissioner, upon a blank furnished by the commissioner, which shall be verified by oath or affirmation.

The application must be accompanied by a fee of fifty dollars.

The application must also be accompanied by a bond, to the use of the Commonwealth of Pennsylvania, in the penal sum of one thousand dollars, with two or more sureties or of a surety company approved by the commissioner, conditioned, among other things, upon the faithful observance by the employment agent of the provisions of this act, together with all rules and regulations issued thereunder; that the employment agent shall discharge all obligations and pay all damages or loss which shall accrue to any person dealing with such employment agent, by reason of any contract or other obligation of such employment agent, or resulting from any fraud, deceit, excessive charges, misrepresentations, or other wrongful act of such employment agent or of his employes or agents, in connection with the business so licensed.

Any person aggrieved may bring an action for the enforcement of said bond in any court of competent jurisdiction.

Application as Evidence.

Section 4. Applications, or a certified copy thereof, under the hand and seal of the commissioner, shall be received as evidence in any court to prove the facts contained therein.

Renewal of Licenses.

Section 5. Each license issued by the commissioner shall expire on the thirtieth day of September next following the day on which it was issued, and shall not be transferable.

Refusal of Licenses.

Section 6. The commissioner shall refuse to issue a license, if, upon investigation, he finds that the applicant is unfit to engage in the business, or has had a license or permit previously revoked, or that the business is to be conducted on or immediately adjoining unsuitable premises, or that any other good reason exists within the meaning of the law.

Revoking of License.

Section 7. The commission shall revoke any license issued under the provisions of this act, with or without a hearing, and may order such license to be returned for cancellation, if the employment agent has violated any provisions of this act or the rules and regulations issued thereunder, or if any cause appears on which a license might have been refused.

Rules and Regulations.

Section 8. The commissioner shall prescribe such rules and regulations as may be necessary for the supervision of employment agents.

Liability for False Statements.

Section 9. Every employment agent shall be held responsible for every untrue statement he makes, publishes, or distributes regarding any employment. He shall also be responsible for the acts, statements, and misconduct of his employe or employes, agent, partner, or person associated with him, where such acts, statements, or misconduct occur in the conduct and operation of such employment agent's business.

No employer seeking employes, and no person seeking employment, shall knowingly make any false statement or conceal any material facts, for the purpose of obtaining employes or employment by or through any employment agent duly licensed.

Form of Contract.

Section 10. Every employment agent using written or printed form of contracts in his business shall file with the commissioner a copy of such contracts. No written or printed form of contract shall be used until approved by the commissioner.

The forms of contract may be changed, but shall not be used by employment agents unless approved by the commissioner.

The commissioner shall direct changes to be made in forms of contracts if he finds the forms are unfair or oppressive, or tending to violate the intent of this act, and shall withhold his approval unless the changes are made.

Fees.

Section 11. Every employment agent shall file with the commissioner, for his approval, a schedule of fees proposed to be charged for any services rendered to employers seeking employes, and persons seeking employment. The schedule of fees may be changed only with the approval of the commissioner.

No registration or other fees in lieu thereof shall be charged or received by such employment agent.

No employment agent shall divide, directly or indirectly, any fees charged or received by him with any person who secures help through such employment agent, or to whom help is referred by such employment agent, nor shall any employment agent offer to so divide any fees.

Receipts.

Section 12. Every employment agent shall give a receipt to each person from whom he has received any money, or other valuable consideration whatsoever, as compensation, directly or indirectly, for services rendered.

The receipt shall state separately the amount received as a fee and the amount received for transportation and for other expenses, and shall set forth such other facts as the commissioner may direct.

Fees to Be Returned.

Section 13. If any person fails, through no fault of his own, to obtain employment from the employer to whom he has been referred by any employment agent, or, after having been engaged by

an employer, is not permitted by said employer to enter upon such employment, the whole amount paid by such person to the employment agent as a fee, or for transportation or other expenses, shall be refunded to him on demand.

Posting of Licenses.

Section 14. Every employment agent shall keep conspicuously posted in his office or place of business the license issued under this act, a copy of the schedule of all fees required to be filed with the commissioner, and other notices or information that the commissioner may direct, and in such form and manner as he may prescribe.

Inspection of Employment Offices.

Section 15. For the purpose of enforcing this act and the rules and regulations issued thereunder, the commissioner or his duly authorized agent may enter any employment office, or place of business of any employment agent, and inspect the registers, cards, or other records of such employment agent.

In the performance of the duties herein required by law, the commissioner or his agents may, at any time, enter any premises. If permission so to enter shall be refused or delayed by any person, the commissioner or his agent may, on oath or affirmation, declare before any alderman, magistrate, or justice of the peace that permission to enter and to investigate has been refused or delayed; whereupon such alderman, magistrate, or justice of the peace, may, upon payment of a fee of one dollar, issue a search-warrant for such premises. Such search-warrant shall describe, as nearly as may be, the premises which it is desired to search or investigate. The commissioner or his agent, armed with such search-warrant, shall have all the authority of a constable or other peace officer in the execution of such warrant. It shall be unlawful for any person to refuse or delay admission to any premises to the commissioner or his agent provided with a search warrant as herein authorized.

Employment for Immoral Purposes Prohibited.

Section 16. No employment agent shall furnish any female for immoral purposes; or send, or cause to be sent, any female employe, to enter as servant, inmate, or for any purpose whatsoever, any place of bad repute, house of ill-fame, or assignation house, or any house or place of amusement kept for immoral purposes, the character of which such employment agent could have ascertained upon reasonable inquiry.

No employment agent shall knowingly admit or allow to remain in such agency any person of bad character, prostitute, gambler, or intoxicated person.

Employment of Children Prohibited.

Section 17. No employment agent shall furnish employment to any child, in violation of the laws regulating the labor of children or their compulsory attendance at school.

Inspection of Labor Camps.

Section 18. The commissioner shall inspect all labor camps and housing accommodations for employes, maintained directly or in-

directly in connection with any work or place where work is being performed, and all places established for the temporary shelter and care of aliens and unemployed persons, and prescribe minimum standards of sanitation for all such labor camps, accommodations, and temporary quarters.

Protection to Aliens.

Section 19. The commissioner shall investigate the general industrial, social, and educational welfare and conditions of aliens within the State, for the purpose of co-operating with the various agencies of the State possessing the requisite jurisdiction in securing such remedial action as may be necessary.

The commissioner shall enforce all laws pertaining to the sale of steamship tickets or orders for transportation; and prescribe rules and regulations for the protection of purchasers in the purchase of and cancellation of third-class or steerage tickets, or orders for transportation; investigate conditions prevailing at all docks, ferries, railway stations, and other places where employes or aliens arrive or depart; and, in co-operation with the proper authorities, afford such employes or aliens protection against frauds, crimes, and exploitations; investigate all complaints of employes and aliens with respect to frauds, extortion, and improper practices by any person or corporation, whether public or private, and present to the proper authorities the results of such investigation for action thereon.

Proceedings.

Section 20. The commissioner shall have power to issue subpoenas, administer oaths, take affidavits and testimony, in all matters relating to the duties and powers herein prescribed. He shall have power to subpoena any witnesses or any person; to examine all books, contracts, records, and documents of any person or corporation, and by subpoena duces tecum to compel production thereof.

All subpoenas shall be issued in the name of the commissioner, under the seal of the Commonwealth.

All hearings held before the commissioner, or his deputy duly authorized, shall be governed by rules prescribed by the commissioner, who shall not be bound by the technical rules of evidence in the examination of witnesses or in the conduct of such hearings.

Penalties.

Section 21. Any person, co-partnership, association, or corporation who shall open and conduct an employment agency without procuring a license as required by this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars, or by imprisonment not exceeding one year, or both, at the discretion of the court.

Any person making any false statement or testifying falsely under oath shall be subject to prosecution for perjury, upon the recommendation of the commissioner to the officials having the requisite jurisdiction.

Any individual, co-partnership, or corporation, or association who shall neglect or refuse to obey any subpoena and give testimony, according to the provisions of this act, or who shall neglect or refuse to answer questions by circular or upon personal application, shall be liable to a penalty of one hundred dollars, to be collected, by order of the commissioner, in an action in which the Commonwealth of Pennsylvania shall be plaintiff, as debts of like amount are collected.

Any person, co-partnership, association, or corporation that shall violate any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be sentenced to pay a fine of not more than one hundred dollars, or to undergo imprisonment not exceeding one year, or both, at the discretion of the court; and, in addition thereto, such person, or each of the members of a co-partnership association, or each of the directors of the corporation, as the case may be, with guilty knowledge of the fact, may be sentenced to pay a fine of not more than one hundred dollars, or to undergo imprisonment in the jail of the proper county for a period of not exceeding one year, or both, at the discretion of the court.

Section 22. This act shall take effect on the first day of October, one thousand nine hundred fifteen.

Section 23. All acts or parts of acts inconsistent with this act are repealed.

FACTORY ACT OF MAY 2, 1905.

(Pamphlet Laws, page 352. No. 226.)

AN ACT

Section 1. Be it enacted, &c., That the term "establishment," where used for the purpose of this act, shall mean any place within this Commonwealth other than where domestic, coal-mining or farm labor is employed; where men, women or children are engaged, and paid a salary or wages, by any person, firm or corporation, and where such men, women or children are employes, in the general acceptance of the term.

(Section 2 of this act, establishing a 14 year age limit, was superseded by Section 2 of the Child Labor Act of 1915. Sections 3, 7 and 8, regulating the hours of employment of minors and females, and providing for seats for girls and adult women, and separate wash rooms and water closets for males and females, were expressly repealed by Section 21 of the Woman's Act of 1913. Sections 5 and 6 were held to be unconstitutional by Judge Staake in *Com. v. Hoopes* 15 D. D. 895, and, together with Section 4, were superseded and repealed by the Child Labor Acts of 1909 and 1915.)

Section 9. Not less than one hour shall be allowed for the noon-day meal, in any establishment. But the Chief Factory Inspector may, for good cause, reduce the time for the noonday meal in establishments where all the other provisions of this act are observed, which entail duties upon the part of employers.

(A standing order has been issued providing that except where special notification shall be given, hours for noonday meals of all other employes may be the same as those for females. See Woman's Act below.)

Section 10. Every person, firm or corporation employing men, [women or children,] in any establishment, shall post and keep posted in a conspicuous place, in every room where such help is employed, a printed copy of the factory laws, a printed notice stating the number of hours per day for each day of the week required of such persons; and in every room where children under sixteen years of age are employed, a list of their names, with their ages.

(So far as relates to women, this section is superseded and repealed by Section 13 of the Women's Act of 1913; and as to children by Section 21 of the Child Labor Act of 1915. As to men, however, the act is still in force.)

Section 11. The owner or person in charge of an establishment where machinery is used shall provide belt shifters or other mechanical contrivances for the purpose of throwing on or off belts or pulleys. Whenever practicable, all machinery shall be provided with loose pulleys. All vats, pans, saws, planers, cogs, gearing, belting, shafting, set-screws, grindstones, emery-wheels, fly-wheels, and machinery of every description shall be properly guarded. The floor space of no working-room in any establishment shall be so crowded with machinery as thereby to cause risk to the life or limb of an employe; nor shall there be in any establishment machinery in excess of the sustaining power of the floors and walls thereof. No person shall remove or make ineffective any safeguard around or attached to machinery, vats or pans while the same are in use, except for the purpose of immediately making repairs thereto, and all such safe-guards so removed shall be properly replaced. Exhaust fans of sufficient power, or other sufficient devices, shall be provided for the purpose of carrying off poisonous fumes and gases, and dust from emery-wheel, grind-stones and other machinery creating dust. If a machine or any part thereof is in a dangerous condition, or is not properly guarded, the use thereof may be prohibited by the Chief Factory Inspector or by his deputy, and a notice to that effect shall be attached thereto. Such notice shall not be removed until the machinery is made safe and the required safeguards are provided, and in the meantime such unsafe or dangerous machinery shall not be used.

Section 12. The owner, agent, lessee, superintendent, or other person having charge or managerial control of any establishment, hotel, hospital, apartment-house or other building, where elevators, hoisting-shafts, lifts or well-holes are used, shall cause the same to be properly and substantially enclosed, secured or guarded; and shall provide such proper traps or automatic doors, so fastened in or at all elevator-ways, except elevators enclosed on all sides, as to form a substantial surface when closed, and so constructed as to open and close by action of the elevator in its passage, either ascending or descending. The cable, gearing or other apparatus of elevators, hoisters, or lifts, shall be kept in a safe condition: Provided, That the provisions of this section shall not apply to cities of the first and second classes.

Section 13. The owner, agent, lessee, or other person having charge or managerial control of any establishment, shall provide or cause to be provided not less than two hundred and fifty cubic feet of air-space for each and every person in every work-room in said establishment, where persons are employed, and shall provide that all work-rooms, halls and stairways in said establishment be kept in a clean and sanitary condition and properly lighted.

Section 14. No person, firm or corporation engaged in the manufacture or sale of clothing or other wearing apparel, cigars or cigarettes, shall bargain or contract with any person, firm or corporation for the manufacture, or partial manufacture, of any of said articles or goods where the same are to be made in any kitchen, living-room or bed-room in any tenement-house or dwelling house, except where the persons bargaining or contracting to make or partially make any of the aforesaid articles or goods are resident members of the family, residing in such tenement-house or dwelling-house where the said articles or goods are to be made or partially made, and who have furnished the person, firm or corporation engaged in the manufacture or sale of said articles or goods, and with whom the bargain or contract is to be made, a certificate from the board of health, of the city or town in which such tenement-house or dwelling-house is situated, that the same is free from any infectious or contagious disease; which certificate may be revoked by the board of health whenever the exigencies of the case shall require: Provided, That the term "family" in this section shall include only the parents and their children, or the children of either.

Section 15. No person, firm or corporation engaged in the manufacture or sale of any of the articles or goods enumerated in section fourteen of this act, shall bargain or contract with any person, firm or corporation for the manufacture, or partial manufacture, of any of the said articles or goods in any workshop, not part of a tenement or dwelling-house, unless the said workshop shall have been inspected by the Chief Factory Inspector or by one of his deputies, and who shall have issued a printed permit to the person in charge of such workshop, stating that the same is in a clean and safe and sanitary condition, and fixing the maximum limit to the number of persons who may be employed therein; the permit to be posted and kept posted in a conspicuous place in such workshop: Provided, That this section shall not apply to any workshop wherein the aforesaid articles or goods are manufactured for the general trade, and are to be sold and delivered in or upon the premises, and are not manufactured, or partially manufactured, under a bargain or contract with any person, firm or corporation employed in the manufacture and sale of the article aforesaid.

Section 16. Whenever the sanitary conditions of any workshop, as defined in section fifteen, is dangerous to the health and safety of the employes therein or to the public, the Chief Factory Inspector or his deputy shall cancel the permit aforesaid, and shall order that the workshop be vacated until the provisions of this act shall have been complied with and the workshop restored to proper sanitary condition.

Section 17. All persons, firms and corporations engaged in the manufacture or baking of bread, cakes, crackers, pastry, pretzels or macaroni, for public sale, shall keep their room or rooms for baking, mixing, storing, or sale of flour or other grain products separate and apart from any sleeping-room, water-closet, urinal, defective-drain or sewer pipe, and shall not permit the harboring of any domestic animal therein. The floors of all baking, mixing, storing and salesrooms shall be kept clean and tightly joined and free from crevices, and the walls and ceilings shall be painted, kalsomined or whitewashed as often as twice in each year, and oftener if, in the opinion of the Chief Factory Inspector or his deputy, the safety of the employes or the public shall require.

Section 18. When the foregoing provisions of section seventeen are complied with, the Chief Factory Inspector or his deputy shall issue to the owner or person in charge of such bake-shop a permit stating that the same is in a clean and sanitary condition; which permit shall be posted and kept posted in the office or salesroom of the bakeshop aforesaid; but when any of the foregoing provisions of section seventeen are not being complied with in any bake-shop, the Chief Factory Inspector or his deputy shall issue to the person in charge, or his representative, a written order to comply with the law aforesaid, within ten days; or he may order the closing of any such bake-shop until the order shall have been complied with, should the safety of the employes or the public, in his opinion, so require.

Section 19. All boilers used for generating steam or heat in any establishment shall be kept in good order, and the owner, agent or lessee of such establishment shall have said boilers inspected by a casualty company in which said boilers are insured, or by any other competent person approved by the Chief Factory Inspector, once in twelve months, and shall file a certificate showing the result thereof, in the office of such establishment, and shall send a duplicate thereof to the Department of Factory Inspection. Each boiler or nest of boilers used for generating steam or heat in any establishment shall be provided with a proper safety-valve and with steam and water-gauges, to show, respectively, the pressure of steam and the height of water in the boilers. Every boiler-house, in which a boiler or nest of boilers is placed, shall be provided with a steam gauge properly connected with the boilers, and another steam-gauge shall be attached to the steam pipe in the engine house, and so placed that the engineer or fireman can readily ascertain the pressure carried. Nothing in this section shall apply to boilers which are regularly inspected by competent inspectors, acting under local laws and ordinances.

Section 20. It shall be the duty of the owner or superintendent of any establishment to report, in writing, to the Chief Factory Inspector every serious accident or serious injury done to any person in his or her employ, where such accident or serious injury occurred in or about the premises where employed, within twenty-four hours after the accident or injury occurs, stating as fully as possible the

cause of such accident or injury; and in all fatal and serious accidents the Chief Factory Inspector or his deputy may subpoena witnesses, administer oaths, and do whatever may be necessary in order to make a thorough and complete investigation of the same: Provided however, That the provisions of this section shall not be construed as interfering with the duties of coroners, under existing laws.

Section 21. It shall be the duty of the owner, superintendent, assistant or person in charge of any establishment to furnish, from time to time, to the Chief Factory Inspector or his deputy any information required by the provisions of this act, and the Chief Factory Inspector and his deputies shall have authority to inspect any such establishment, at any time, for the purpose of enforcing the provisions of this act.

Section 22. That wherever the law makes it the duty of the owner, lessee, or other person in charge of any building, or room or rooms in any building, to erect and maintain fire-escapes, or appliances for the extinguishment of fire, or for proper and sufficient exits in case of fire or panic, the Chief Factory Inspector or his deputy shall inspect all said buildings, or the room or rooms in said buildings, and notify the owners, lessees, or other persons in charge of same, to comply with said law. And all fire escapes, exits and fire extinguishing appliances shall be provided and located by order of the Chief Factory Inspector or his deputy, and shall be subject to the approval of the Chief Factory Inspector or his deputy: Provided, That the provisions of this section shall not apply to cities of the first and second classes.

Section 23. Any person who violates any of the provisions of the foregoing sections of this act, or who suffers any female, minor or a child to be employed in or about his or her establishment, in violation of any of the provisions of the foregoing sections of this act, or who, being authorized to administer oaths, shall violate any of the provisions of sections five and six of this act, shall be deemed guilty of misdemeanor, and, on conviction, shall be punished by a fine of not less than twenty-five dollars and not more than five hundred dollars, or an imprisonment in the county jail for a term not less than ten days nor more than sixty days, for each and every such violation. In all cases the prosecution shall be instituted, in the name of the Commonwealth, by the deputy factory inspector of the district where the offense is alleged to have been committed, and the hearing shall be conducted by the alderman, justice of the peace or other committing magistrate before whom the information is lodged. After full hearing of the parties in interest, the alderman, justice of the peace or other committing magistrate shall, if the evidence warrants it, impose the penalty herein provided, which shall be final to the party against whom the penalty is imposed unless the party upon whom the penalty is imposed shall furnish good and sufficient bail for his or her appearance at the next term of the court of quarter sessions of the county wherein the offense is alleged to have been committed.

(Sections 25-27, inclusive, relate to the conduct of the Factory Inspection Department, since merged in the Department of Labor and Industry. The final section (28) contains the usual repealing clause.)

FIRE AND PANIC ACT OF MAY 3, 1909.

(Pamphlet Laws, page 417. No. 233.)

AN ACT

For the safety of persons from fire or panic in certain buildings, not in cities of the first and second classes, by providing proper exits, fire-escapes, fire-extinguishers, and other preventatives of fire, by vesting jurisdiction for the enforcement of this act in the Department of Factory Inspection; and by providing proper penalties for any violation of the same.

Section 1. Be it enacted, &c., That every building in this Commonwealth, other than buildings situated in cities of the first and second classes, having more than two stories, and buildings having one or more galleries above the first or ground floor, now used or hereafter to be used, in whole or in part, as a public building, office building, and not of fireproof construction, public or private institution, sanitorium, surgical institute, asylum, hospital, schoolhouse, academy, dormitory, college, theatre, public hall, lodge hall, or place of public resort; and every building in which persons are usually employed above the second story, in a factory, workshop, or mercantile establishment; every hotel, restaurant, apartment-house, boarding-house, or lodge-house, in which persons reside or lodge above the second story; and every tenement-house, apartment-house, or flat occupied by two or more families above the first story, shall be provided with proper ways of egress, or means of escape from fire, sufficient for the use of all persons accommodated, assembled, employed, lodged, or residing therein; and such ways of egress and means of escape shall be kept free from obstruction, in good repair, and ready for use, at all times; and all rooms above the second story in said buildings shall be provided with more than one way of egress, or escape from fire, which shall be placed as near as practical at opposite ends or sides of the room, and leading to fire-escapes on the outside of such buildings or to stairways on the inside. Where any of said buildings is designated for the use or occupancy of fifty or more persons, the external doors of the same shall open outward, and be so constructed or arranged as to afford, when open, an unobstructed external passage-way of not less than five feet in the clear, and shall have landings, inside of the external doorways of dimensions not less than four feet between the external doors and the adjoining stairways, said landings to be of a width not less than the stairway approaches thereto.

Section 2. In all theatres, opera houses, or other buildings, where stage scenery, moving pictures or other apparatus is used, there shall be provided one or more direct exterior doorways from the stage, and for dressing-rooms under the stage a direct exterior doorway shall be provided; and all said doorways shall be not less than three feet in width, and the passage-ways to and from the same shall be unobstructed and properly lighted. Neither on or about the stage, auditorium, or galleries shall any inflammable or explosive oil be used for lighting purposes; and all lights on or about the stage, and electric wires and appliances for electric switches, shall be safely

guarded. All drop-curtains and sky-borders shall be of an approved non-combustible substance; and on each side of the stage standpipes of at least two inches in diameter shall be provided, with hose and attachments of not less than one and one-half inches in diameter, and of proper and sufficient quantity. There shall also be provided, for each side of the stage, not less than two fire-extinguishers, and one cask of not less than forty-two gallons capacity, which shall be kept full of water, and two buckets for each cask; buckets and casks to be painted red and kept in readiness for immediate use. All auditoriums and galleries of said buildings, as described in this section, shall be provided with a center aisle and two side aisles, each of a width of not less than four feet in the clear, and providing a continuous unobstructed passage way to the main exits and to the exits leading to the fire-escapes; and the words "Exit to fire-escape," in large legible illuminated letters shall be posted and kept posted before each fire-escape exit; and all exits shall open outward, and shall be kept unlocked and ready for instant use, from the opening of said buildings to the close of each and every entertainment therein.

Section 3. In addition to the foregoing means of escape from fire, all such buildings as are enumerated in section one of this act that are more than two stories in height, and buildings having one or more galleries above the first floor, shall have one or more fire-escapes on the outside of said buildings, as may be directed by the Chief Factory Inspector or a deputy factory inspector, except in such cases as he may deem such fire-escape to be unnecessary, in consequence of adequate provision having been already made for safety in event of fire or panic; and in such cases of exemption, the said Chief Factory Inspector or a deputy factory inspector shall give the owner, lessee, or occupant of said building a certificate to that effect, and his reason therefor. And such fire-escapes as are provided for in this section shall be of wrought iron, constructed according to specifications to be issued or approved by the Department of Factory Inspection, and shall be connected with each floor above the first, firmly fastened and secured, and of sufficient strength to sustain a weight of not less than four hundred pounds per step, on a safety factor of four; each of which fire-escapes shall have landings or balconies at each story, capable of sustaining a weight of not less than eighty pounds per square foot, guarded by railings, not less than three feet in height, and embracing one or more windows or doors at each story, and connecting with the interior by easily accessible and unobstructed openings; and all the balconies or landings shall be connected by external iron stairways, placed at a slant of not more than forty-five degrees, protected by well secured handrails; the stairway steps to be not less than six inches in width and twenty-four inches in length. Fire-escapes now in use and hereafter erected must be painted once a year, and be kept in safe condition and up to the standard requirements of this section.

Section 4. That where any of the aforementioned buildings are so constructed that a fire-escape cannot be erected upon the same without trespassing upon the property of the owner or owners of adjoining lands or buildings, and where permission to erect fire-escapes has been refused by said owners of adjoining lands or buildings, it shall be the duty of the owner or owners of any of the afore-

mentioned buildings, constructed as aforesaid, to erect an internal fireproof means of escape, the same to be located and erected under the direction of the Chief Factory Inspector. Should the construction of any of the aforesaid buildings be such as will neither permit of an external iron fire-escape nor of an internal fire-proof escape, it is hereby enjoined upon the Chief Factory Inspector to notify, in writing, the owner or owners of any building, so constructed, to discontinue the occupancy of the whole or of a part of said building for any of the purposes which make said building amenable to the fire-escape provisions of this act.

Section 5. To better secure compliance with the provisions of the foregoing sections of this act, the owner or owners of any building now used for other purpose than aforesaid, which is to be adapted to any of the aforesaid uses, or of any building to be erected for any of the aforesaid purposes, shall, before adapting or erecting any such building, submit to the Chief Factory Inspector architectural designs and specifications of such building, showing that compliance with the requirements of the foregoing sections is provided for therein, and such building shall not be so adapted or erected without the approval of the Chief Factory Inspector.

Section 6. The owner or owners of any of the buildings mentioned in the foregoing provisions of this act, who shall wilfully fail or refuse to comply with the provisions of this act, or who shall wilfully fail or refuse to observe the orders for the enforcement of this act, issued to said owner or owners by the Chief Factory Inspector or a deputy factory inspector, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine of five hundred dollars, or six months imprisonment, or either or both, in the discretion of the court. And in case of fire occurring in any of said buildings, in the absence of such doorways, landings, exits, fire-escapes or fire preventatives, as provided for in this act, the owner or owners aforesaid shall be liable for damages, in case of death or personal injury, the result of fire or panic in any of said buildings; and such action for damages may be maintained by any person now authorized by law to sue, as in other case of loss by death or injuries.

Section 7. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

FIRE DRILL ACT OF JUNE 7, 1911.

(Pamphlet Laws, page 677.)

AN ACT

To require fire drills in factories and industrial establishments, where women or girls are employed: providing for the promulgation of rules in respect thereto, and providing penalties for the violation thereof.

Section 1. Be it enacted, &c., That in all factories and industrial establishments where women or girls are employed, and where fire-escapes, appliances for the extinguishment of fires, or proper and suffi-

cient exits in case of fires or panic, either or all, are required by law to be maintained, fire drills shall be periodically conducted, not less than once a month, by the person or persons in charge, under rules and regulations to be promulgated, in cities of the first and second classes, by the Fire Marshal, and, elsewhere in the Commonwealth, by the Chief Factory Inspector, in which the persons employed in such factories or establishments shall be instructed in, and made thoroughly familiar with, the use of the said fire-escapes, appliances, and exits; which said drill shall include the actual use of the same, and the complete removal of the persons, in an expeditious and orderly manner, by means of such fire-escapes and exits, from the building to a place of safety on the ground outside.

Section 2. The Fire Marshal and his assistants in cities of the first and second class, and the Chief Factory Inspector and several deputy inspectors elsewhere in the Commonwealth, are hereby required to see that the provisions of this act are faithfully carried out.

Section 3. Any person who violates or fails to comply with the provisions of this act shall be guilty of a misdemeanor, and on conviction shall be sentenced to pay a fine of not less than twenty-five dollars (\$25.00) nor more than five hundred dollars (\$500.00), and to undergo imprisonment in the county jail for not less than ten days nor more than sixty days, either or both.

FOUNDRY ACT OF JUNE 7, 1911.

(Pamphlet Laws, page 673.)

AN ACT

Requiring foundries to be provided with toilet room and water closet; regulating same; and providing a penalty for violation thereof.

Section 1. Be it enacted, &c., That every person, firm, or corporation, being the owner or lessee of any foundry for the casting of iron, steel, brass, or other metal, wherein ten or more men shall be employed, shall cause to be established and maintained in a place conveniently accessible, and connected with said foundry in such a manner that access thereto can be had without exposure to the open air, a toilet-room of suitable size, wherein said employes may change their clothes; such toilet-room shall be provided with wash-bowls, sinks, or other suitable fixed appliances, duly connected and supplied with running hot and cold water. There shall also be established and maintained, separate from said toilet-room, a suitable water-closet. *It shall be the duty of the factory inspector or his duly authorized agent to enforce the provisions of this act. For that purpose the factory inspector or his duly authorized agent may enter at any reasonable time any foundry for the purpose of inspecting the same to ascertain whether the provisions of this act have been complied with.*

(The portion of the above appearing in italics was inserted by amendment of April 4, 1913. P. L. 42. No. 32.)

Section 2. The said toilet room and the said water closet shall be connected with the foundry building in such a way that access thereto may be had without exposure to the open air and shall be properly heated, ventilated, cleaned and protected, so far as reasonably practicable, from the dust of such foundry.

Section 3. Any person, firm, or corporation who or which shall violate any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof before any magistrate, alderman, or justice of the peace, shall be sentenced to a fine not exceeding one hundred dollars.

LEAD POISONING ACT OF JULY 26, 1913.

(Pamphlet Laws, page 1363. No. 851.)

AN ACT

To prevent occupational diseases; and to provide for the health of employes exposed to the danger of lead-poisoning and other occupational diseases, by regulating certain manufacturing establishments; providing for medical examinations and reports, and requiring sanitary precautions and appliances; and making violation of its provisions a misdemeanor, and providing penalties for violation thereof.

Section 1. Be it enacted, &c., That every employer shall, without cost to the employes, provide reasonably effective devices, means, and methods to prevent the contraction by his employes of any illness or disease incident to the work or process in which such employes are engaged in the industries and occupations specified in section two of this act.

Section 2. Every work or process in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or flua-silicate is hereby declared to be especially dangerous to the health of the employes who, while engaged in such work or process are exposed to lead dusts, lead fumes, or lead solutions.

Section 3. Every employer shall, without cost to the employes, provide the following devices, means, and methods for the protection of his employes, who, while engaged in any work or process included in section two, are exposed to lead dusts, lead fumes, or lead solutions:—

(a). The employer shall provide and maintain work-rooms, adequately lighted and ventilated, and so arranged that there is a continuous and sufficient change of air; and all such rooms shall be fully separated by partition walls from all departments in which the work or process is of non-dusty character; and all such rooms shall be provided with a floor permitting an easy removal of dust by wet methods or vacuum cleaning, and all such floors shall be so cleaned daily.

Every work or process referred to in section two, including the corroding or oxidizing of lead, and the crushing, mixing, sifting, grinding and packing of all lead salts or other compounds referred to in section two, shall be so conducted, and such adequate devices

provided and maintained by the employer, as to protect the employe as far as possible from contact with lead dust or lead fumes. Every kettle, vessel, receptacle, or furnace in which lead, in any form referred to in section two, is being melted or treated, and any place where the contents of such kettles, receptacles, or furnaces are discharged, shall be provided with a hood connected with an efficient air-exhaust; all vessels or containers, in which dry lead in any chemical form or combination referred to in section two is being conveyed from one place to another within the factory, shall be equipped, at the places where the same are filled or discharged, with hoods having connection with an efficient air-exhaust; and all hoppers, chutes, conveyors, elevators, separators, vents from separators, dumps, pulverizers, chasers, dry pans, or other apparatus for drying pulp lead, dry-pans, dump, and all barrel packers and cars, or other receptacles in to which corrossions are at the time being emptied, shall be connected with an efficient dust-collecting system; such system to be regulated by the discharge of air from a fan, pump, or other apparatus, either through a cloth dust-collector, having an area of not less than one-half square foot of cloth to every cubic foot of air passing through it per minute, the dust-collector to be placed in a separate room, which no employe shall be required or allowed to enter except for essential repairs while the works are in operation, or such other apparatus as will efficiently remove the lead dusts from the air of the workrooms.

(b) The employer shall provide a wash-room, or rooms, which shall be separate from the work rooms, be kept clean, and be equipped with:

(1) Lavatory basins, fitted with waste-pipes and two spigots conveying hot and cold water; or

(2) Basins placed in troughs fitted with waste-pipes, and for each basin two spigots conveying hot and cold water; or

(3) Troughs of enamel or similar smooth impervious material, fitted with waste pipes, and for every two feet of trough length two spigots conveying hot and cold water.

Where basins are provided there shall be at least one basin for every five such employes; and where troughs are provided, at least two feet of trough length for every five such employes. The employer shall also furnish nail-brushes and soap, and shall provide at least three clean towels per week for each such employe. A time allowance of not less than ten minutes, at the employer's expense, shall be made to each such employe for the use of said wash-room before the lunch hour and at the close of the day's work.

The employer engaged in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or fluo-silicate shall also provide at least one shower-bath for every ten such employers. The baths shall be approached by wooden runways, be provided with movable wooden floor gratings, be supplied with controlled hot and cold water, and be kept clean. The employer shall furnish soap, and shall provide at least two clean bath towels per week for each such employe. An additional time allowance of not less than ten minutes, at the employer's expense, shall be made to each such employe for the use of said baths, at least

twice a week, at the close of the day's work. The employer shall keep a record of each time that such baths are used by each employe, which record shall be open to inspection at all reasonable times by the State Department of Labor and Industry, and also by the State Department of Health.

(c) The employer shall provide a dressing-room, or rooms which shall be separate from the workrooms, be furnished with a double sanitary locker or two single sanitary lockers for each such employe and be kept clean.

(d). The employer shall provide an eating-room or eating-rooms, which shall be separate from the work-rooms, be furnished with a sufficient number of tables and seats, and be kept clean. No employe shall take, or be allowed to take, any food or drink of any kind into any workroom, nor shall any employe remain, or be allowed to remain, in any workroom during the time allowed for his meals.

(e). The employer shall provide and maintain a sufficient number of sanitary drinking-fountains, readily accessible for the use of employes.

(f). The employer shall provide at least one pair of overalls and one pair of jumpers for each such employe, and repair or renew such clothing when necessary, and wash the same weekly.

(g). The employer shall provide, and renew when necessary, at least one reasonably effective respirator for each employee who is engaged in any work or process included in section two.

Section 4. Every employe who, while engaged in any work or process included in section two, is exposed to lead dusts, lead fumes, or lead solutions, shall—

(a). Use the washing facilities provided by the employer in accord with section three (b), and wash himself at least as often as a time allowance is therein granted for such use;

(b). Use the eating-room provided by the employer in accord with section three (d), unless the employe goes off the premises for his meals;

(c). Put on, and wear at all times while engaged in such work or process, a suit of the clothing provided by the employer in accord with section three (f), and remove the same before leaving at the close of the day's work, and keep his street clothes and his working clothes, when not in use, in separate lockers or separate parts of the locker provided by the employer in accord with section three (c).

(d). Keep clean the respirators provided by the employer in accord with section three (g), and use one at all times while he is engaged in any work or process included in section two of this act.

Section 5. The employer shall post in a conspicuous place in every workroom where any work or process included in section two is carried on, in every room where washing facilities are provided, and in every dressing-room and eating-room, a notice of the known dangers arising from such work or process, and simple instructions for avoiding as far as possible such dangers. The Commissioner of Labor and Industry shall prepare a notice containing the provisions of this act, and shall furnish free of cost a reasonable number of copies thereof to every employer included in section two, and the employer shall post copies thereof in the manner hereinbefore stated. The notices required in this section shall be printed in plain type, on cardboard, and shall be in English and in such other languages

as the circumstances may reasonably require. The contents of such notices shall be explained to every employe by the employer, when the said employe enters employment in such work or process; interpreters being provided by the employer when necessary to carry out the above requirements.

Section 6. The employer shall cause every employee who while engaged in any work or process included in section two, is exposed to lead dusts, lead fumes, or lead solutions, to be examined at least once a month, for the purpose of ascertaining if symptoms of lead-poisoning appear in any employee. The employee shall submit himself to the monthly examination, and to examination at such other times and places as he may reasonably be requested by the employer, and he shall fully and truly answer all questions bearing on lead-poisoning asked him by the examining physician. The examinations shall be made by a licensed physician, designated and paid by the employer, and shall be made during the working hours, a time allowance therefor at the employer's expense being made to each employee so examined.

Section 7. Every physician making an examination, under section six, and finding what he believes to be symptoms of lead-poisoning, shall enter, in a book kept for that purpose in the office of the employer, a record of such examination, containing the name and address of the employee so examined, the particular work or process in which he is engaged, the date, place, and finding of such examination, and the directions given in each case by the physician. The record shall be open to inspection at all reasonable times by the State Department of Labor and Industry and by the State Department of Health.

Within forty-eight hours after such examination and finding, the examining physician shall send a report thereof, in duplicate,—one copy to the State Department of Labor and Industry and one to the State Department of Health. The report shall be on, or in conformity with, blanks to be prepared and furnished by the State Department of Health, free of cost, to every employer included in section two, and shall state: (a) name, occupation, and address of employee; (b) name, business, and address of employer; (c) nature and probable extent of disease; and (d) such other information as may be reasonably required by the State Department of Health.

The examination physician shall, also, within the said forty-eight hours, report such examination and finding to the employer; and after five days from such report the employer shall not continue the said employee in any work or process where he will be exposed to lead dusts, lead fumes, or lead solutions, included in section two of this act.

Section 8. The State Department of Labor and Industry shall enforce this act, and prosecute all violations of the same. The officers, or their agents, of the said department, shall be allowed at all reasonable times to inspect any place of employment included in this act.

Every employer who, either personally or through any agent, violates or fails to comply with any provisions of section one or section three, shall be guilty of a misdemeanor and on conviction, for the first offense, shall be sentenced to pay a fine of not less than one hundred (\$100) dollars, nor more than two hundred (\$200) dol-

lars; and on conviction for a second offense shall be sentenced to pay a fine of not less than two hundred (\$200) dollars, nor more than five hundred (\$500) dollars; and on conviction for each subsequent offense shall be sentenced to pay a fine of not less than three hundred (\$300) dollars, nor more than one thousand (\$1,000) dollars; and in each case he shall stand committed until such fine and the costs are paid, or until he is otherwise discharged by due process of law.

Every employe who violates or fails to comply with any provision of section four shall be guilty of a misdemeanor; and on conviction, for the first offense, shall be sentenced to pay a fine of not less than ten (\$10) dollars, nor more than twenty (\$20) dollars; and on conviction for the second offense shall be sentenced to pay a fine of not less than twenty (\$20) dollars, nor more than fifty (\$50) dollars; and on conviction for each subsequent offense, not less than thirty (\$30) dollars, nor more than one hundred (\$100) dollars; and in each case he shall stand committed until such fine and the costs are paid, or until he is otherwise discharged by due process of law.

Every employer who, either personally or through any agent, violates or fails to comply with any provisions of sections five, six or seven relating to him, and every employe who violates or fails to comply with the provisions of section six relating to him, shall be guilty of a misdemeanor, and on conviction thereof shall be sentenced to pay a fine of not less than ten (\$10) dollars, nor more than one hundred (\$100) dollars.

Section 10. In this act, unless the context otherwise requires, "employer" includes persons, firms, partnerships, limited partnerships, and corporations.

Section 11. For the purpose of determining the constitutionality of any provisions of this act, section one hereof is declared to be independent of, and separable from the remaining sections.

Section 12. This act shall take effect on the first day of October, one thousand nine hundred and thirteen, except as to subdivisions (a), (b), (c), and (d) of section three, which subdivisions shall take effect as follows:

Subdivisions (b), (c), and (d) of section three, on the first day of October, one thousand nine hundred and fourteen;

Subdivision (a) of section three, on the first day of October, one thousand nine hundred and fifteen.

MATTRESS ACT OF MAY 1, 1913—As Amended, 1915.
(Pamphlet Laws, page 134. No. 90.)

AN ACT

Defining mattresses; regulating the making, remaking, and sale thereof; prohibiting the use of unsanitary and unhealthy materials therein; requiring that the materials used shall be accurately described, and prescribing the manner in which mattresses shall be labeled; providing for the enforcement of the provisions of this act; making certain acts criminal, and punishing the same; imposing certain duties upon the Commissioner of Health and the Chief Factory Inspector; and repealing legislation inconsistent with this act.

Definitions.

Section 1. Be it enacted, &c., That (1) the term "mattress," as used in this act, shall be construed to mean any quilted pad, mattress, mattress pad, bunk quilt, or cushion, stuffed or filled with wool, hair, or other soft material, except feathers, to be used on a couch or other bed for sleeping or reclining purposes.

(2) The term "person" as used in this act, shall be construed to include all individuals and all firms or co-partnerships.

(3) The term "corporation," as used in this act, shall be construed to include all corporations, companies, associations, and joint-stock associations or companies.

(4) Whenever the singular is used in this act it shall be construed to include the plural; whenever the masculine gender is used in this act it shall include the feminine and neuter genders.

Prohibitions Upon the Making and Sale of Mattresses.

Section 2. (1) No person or corporation, by himself or his agents, servants, or employes, shall employ or use in the making, remaking, or renovating of any mattress:

(a) Any material of any kind that has been used in, or has formed a part of, any mattress used for or about any person having any infectious or contagious disease;

(b) Any material known as "shoddy," and made in whole or in part from old or worn clothing, carpets or other fabrics, or material previously used, or any other fabric or material from which shoddy is constructed;

(c) Any material, not otherwise prohibited by this act, of which prior use has been made, unless the said material has been thoroughly sterilized and disinfected by a reasonable process approved by the Commissioner of Health of this Commonwealth.

(2) No person or corporation, by himself or by his agents, servants, or employes, shall sell, *lease*, offer to sell, or *lease* or deliver, or consign *in sale or lease*, or have in his possession with intent to sell, *lease*, deliver, or consign *in sale or lease*:

(a) *Any mattress that has been used for or about any person having any infectious or contagious disease;*

(b) Any mattress made, remade, or renovated in violation of subsection one of this section;

(c) *Any mattress, not otherwise prohibited by this act, of which prior use has been made, unless since last used it has been thoroughly sterilized and disinfected by a reasonable process approved by the Commissioner of Health of this Commonwealth.*

(The foregoing section is as amended by the Act of May 1, 1915, Pamphlet Laws, page 510, No. 219.)

Section 3. (1) No person or corporation, by himself or by his agents, servants, or employes, shall, directly or indirectly, at wholesale or retail, or otherwise, sell, *lease*, offer to sell or *lease*, or consign *in sale or lease*, or have in their possession with intent to sell or lease, or consign in sale or lease, any mattress that shall not have plainly and indelibly written or printed thereon, or upon a *plain* muslin or linen tag securely sewed to the covering thereof, a statement in the English language setting forth:

(a) The materials used in filling said mattress, and whether the same are, in whole or in part, new or old;

(b) The name and address of the maker, vendor, or successive vendors;

(c) And, upon a mattress of which prior use has been made, the words "Second-Hand," together with the date of sterilization and disinfection, and the name and address of the person or corporation sterilizing or disinfecting the same.

No additional information shall be contained in said statement.

(2) No person or corporation, by himself or by his agents, servants, or employes, shall place upon any mattress the statements required by subsection one (a) and (b) of this section unless said mattress has been made, remade, or renovated by him in accordance with this act; and no person or corporation, by himself or his agents, servants, or employes, shall place upon any mattress the statements required by subsection one (c) of this section unless the said mattress has been sterilized and disinfected by him in accordance with this act: *Provided, That the vendor, in either case, shall insert his name and address in the statement.*

(The foregoing two sections are as amended by the Act of May 14, 1915, Pamphlet Laws, page 510, No. 219, the amendments added being indicated by italics.)

When Description as Felt May Be Made.

Section 4. It shall be unlawful to use in the said statement concerning any mattress the word "Felt," or words of like import, if there has been used in filling said mattress any materials which are not felted and filled in layers, unless the said statement shall plainly set forth all the different materials so used.

Misleading Description Prohibited.

Section 5. It shall be unlawful to use in the description in the said statement any misleading term or designation, or term or designation likely to mislead.

Section 6. The statement required under section three of this act shall be *not less than three by four and a half inches in size*, and in form shall be as follows:

Official Statement.

Materials used in filling, ...

 Made by, ...
 Address, ...
 Vendor, ...
 Address, ...

This article is made in compliance with the act of Assembly of Pennsylvania, approved the first day of May, one thousand nine hundred thirteen, as amended.

.....

(The foregoing section is as amended by the Act of May 14, 1915, Pamphlet Laws, page 510, No. 219, the amendment being indicated by italics.)

Removal of Description.

Section 7. Any person who shall remove, deface, alter, or in any manner attempt the same, or shall cause to be removed, defaced, or altered, any mark or statement placed upon any mattress under the provisions of this act, shall be guilty of a violation of this act.

Separate Offenses.

Section 8. The unit for a separate and distinct offense in violation of this act shall be each and every mattress made, remade, renovated, sold, offered for sale, delivered, consigned, or possessed with intent to sell, deliver or consign, contrary to the provisions hereof.

Penalties.

Section 9. Any person or corporation violating the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof before a magistrate or justice of the peace shall be punished by a fine of not less than twenty-five dollars, and not more than fifty dollars, for each offense.

Duties of Commissioner of Health.

Section 10. Within sixty days after any process of sterilization and disinfection shall have been submitted to the Commissioner of Health of this Commonwealth, under subsection one (c) of section two of this act, the said commissioner shall approve or disapprove the same, and, if he disapprove, shall state his reasons therefor.

Duties of Chief Factory Inspector.

Section 11. All places where mattresses are made, remade, or renovated, or materials for mattresses prepared, or where mattresses are offered for sale, or are in the possession of any person or corporation with intent to sell, deliver or consign them, shall be subject to inspection by the Chief Factory Inspector, whose duty it shall be, in case he has reason to believe any person or corporation is violating this act, to prosecute such person or corporation therefor.

Information by Individuals, Enforcement by Individuals.

Section 12. Any individual who has reason to believe that this act has been or is being violated may present the relevant facts to the Chief Factory Inspector, or any of his deputies; in which case it shall be the duty of the Chief Factory Inspector to make an investigation of such facts, as on his own initiative; and, if he is of opinion that the act has been or is being violated, to prosecute the person or corporation guilty thereof. Any individual may institute proceedings to enforce this act and to punish violations of its provisions.

Repeal.

Section 13. All acts or parts of acts inconsistent herewith are hereby repealed.

Time in Effect.

Section 14. This act shall take effect the first day of January, Anno Domini one thousand nine hundred and fourteen.

MOVING PICTURE ACT OF MAY 1, 1909.

(Pamphlet Laws, page 346. No. 206.)

Note.—As to cities of the first class this act has been superseded by the Act of June 9, 1911, P. L. 746, providing for the issuance of permits by the Chiefs of the Bureaus of Building Inspection and Fire, and the Fire Marshal.

AN ACT

Regulating, requiring, and defining certain general specifications for the use and construction of permanent booths or enclosures for operating therein moving-picture machines; regulating, requiring, and defining certain general specifications for the use and construction of portable booths or enclosures for operating therein moving-picture machines; and providing for the supervision and inspection of the same by the Department of Factory Inspection of the Commonwealth of Pennsylvania; and providing penalties for the violation of the provisions thereof; and providing that the provisions thereof shall not apply to cities of the first and second class.

Section 1. Be it enacted, &c., That it shall be unlawful for any person, firm, association, or corporation to erect, set up, construct, maintain, or use any permanent booth or enclosure for the purpose of operating therein moving-picture machines, unless they are built, erected, and constructed as follows:

Size.

All permanent booths or enclosures to be at least seven feet high, the floor space to vary according to the number of machines in booths or enclosures, as follows:

One picture machine, six feet by eight feet.

One picture machine and one stereopticon, nine feet by eight feet.

Two picture machines and one stereopticon, twelve feet by eight feet.

The same to be made of structural steel, as follows:

Four outside horizontal members at top and bottom.

Four corner uprights and members supporting roof, to be made of one and one-half-inch by one and one-half by one-fourth inch angle-irons.

Intermediate uprights to be spaced every two feet, and to be made of either one and one-half inch by one and one-half inch by one-fourth inch angle-irons or two inch by two inch by one-fourth inch tee-irons.

Tee-irons, to which roof is attached, to be made of one and one-half inch by one and one-half inch by three-sixteenth inch tee irons.

All joints to be made with a three-sixteenth inch steel plate, to which each angle-iron or tee-iron shall be riveted or bolted by the use of at least two (2) one-fourth inch bolts or rivets.

All bolts or rivets in frame to have flat heads, said heads always to be placed on exterior side of booth; all angle- or tee-irons being so countersunk as to accomplish this result.

Frame to be built with a six-foot by two-foot doorway; frame of said doorway to be built of one inch by one inch by three-sixteenth inch angle-irons, which are to be joined together by the use of a three-sixteenth inch steel plate.

Covering of Booth.

Sides and top of booth to be covered with asbestos boards of at least one-fourth inch in thickness; said boards to be cut and arranged that vertical joints between boards shall always come over an angle or tee-iron, so that both boards may be securely fastened to the same.

After booth is complete, all openings where combustible material is exposed must be plugged with asbestos cement, or other equally satisfactory material. When joints of asbestos boards, on outside of booth, do not come over angles of tee-irons, the cracks between the boards shall be covered by a strip of asbestos board at least one-eighth inch thick and two inches wide; said strips to be securely fastened to both boards in such manner as to cover the exposed joints. The above-mentioned strips and all asbestos boards shall be secured in the proper place by the means of proper bolts and nuts; said bolts and nuts to be spaced not more than six inches apart.

Flooring.

Floor shall be made of two parts, an upper and a lower floor. Lower floor shall be made of boards seven-eighth inches minimum thickness, supported on lower leg of horizontal angle-irons. Resting on this floor shall be a floor made of asbestos boards of three-eighth inch minimum thickness, or an equally good material.

Windows.

There shall not be more than two windows per machine in the booth,—one for the operator and one for the machine. Windows for machine shall not be more than six inches high and twelve inches long, and shall be located and cut after machine is set up. Operator's window shall not be more than four inches wide nor more than twelve inches high.

All windows shall be provided with gravity-doors, which, when closed, shall overlap the window opening at least one inch on all sides; said doors to be held open normally by use of a fine combustible cord in series with a fusible link, so arranged that the doors may easily be released by hand.

Main Door.

Outside of door to be provided with a substantial spring, sufficient to keep door closed. Door to be provided with stop to prevent it from swinging into booth or injuring the hinges.

Shelves.

To be made up of slate slabs or board not less than seven-eighth inches thick, not exceeding four feet in length or twelve inches in width. Said shelves, if of board, to be painted with at least three coats of asbestos paint, and supported by means of angle-irons. Upper shelf to be used for the rewinding and the repairing of films; the lower shelf to be used for the storage of films. A separate metal case, made without solder, shall be provided for each film when the same is not in the magazine or in the process of winding; said films to be kept in these cases.

Ventilation.

Booths to be provided with an inlet in each of four sides; said inlets to be fifteen inches long, three inches high, the lower side of the same not be more than three inches above floor level. Said inlets to be covered on the inside by a wire net of not greater than one-eighth inch mesh netting, to be firmly secured to the asbestos boards by means of iron strips and screws.

Near the center of the top of the booth shall be a circular opening of not less than ten inches in diameter; the upper side of said opening to be provided with an iron flange, which flange is to be securely fastened to the tee-irons supporting the roof. Securely fastened to this flange shall be a vent-pipe of not less than ten inches in diameter; said pipe leading to the outside of the building or to a special incombustible vent-flue. In this vent-pipe shall be placed a box containing a twelve-inch electric fan; said box to be provided with a door of sufficient size to permit of the examination or removal of this fan; this door to be made tight, and provided with proper fastenings. Box and vent-pipes to be made of galvanized iron or other non-combustible material; fan to be so connected that it can be controlled from within the booth.

Wiring.

If house lights are controlled from within the booth, an additional emergency control must be provided near the main exit, and kept at all times in good condition.

All electric wires to be brought in to the booth and carried to all machines, lights, et cetera, in conduits; one light will be allowed for each machine, and one for the rewinding bench; but all such lights shall be provided with wire guards.

Rheostats.

All rheostats to be mounted on slate insulator, properly supported; said supports to be made of iron, and securely fastened to the floor; rheostats to be securely fastened to slate insulator.

Machines.

Must be securely fastened to the floor to prevent accidental overturning of the same: Provided, That this section shall not apply to cities of the first and second classes.

Section 2. That it shall be unlawful for any person, firm, association, or corporation to erect, set up, construct, maintain, or use any

portable booth or enclosure, for the purpose of operating therein moving-picture machines, unless they are built, erected and constructed as follows:—

Size.

Portable booths or enclosures are to be at least six and one-half feet high and five feet square, and are permitted for the use of one picture machine only.

Frame.

The frame is to be made of standard pipe angle-iron, ventilator trap, and suitable fittings. The pipe frame and angle-iron trap are to conform strictly to specifications hereinafter set forth, and the fittings and details of construction must be approved by the Department of Factory Inspection of the Commonwealth of Pennsylvania.

Skeleton Frame.

Four corner uprights, to be made of three-quarter inch standard pipe.

Eight horizontal members, to be made of three-quarter inch standard pipe.

Eight corner fittings, to be made of iron or bronze castings.

Ventilator Trap.

Ventilator trap, to be made of one inch by one-eighth inch angle-iron, shall extend full width of the top and two inches beyond the front of the top pipe; shall be suitably hinged, not less than two feet from the edge of the front angle corners, and joints to be made with one-eighth inch steel plates, riveted or bolted to each angle-iron by the use of at least two three-sixteenths inch rivets or bolts.

Covering of Booth.

The side and top covering of the booth shall be made of an approved pure asbestos cloth, same as used for asbestos curtains, weighing not less than two pounds to the square yard. Seams and hems in the asbestos cloth shall lap at least one inch, and be stitched on each edge with asbestos sewing twine. The top covering shall be made separate from the side covering. It shall completely cover the top, and have the outside flap hang down all around the sides, not less than six inches deep. It shall be fastened tightly, and secured to the top pipes and ventilator trap by means of asbestos cords. The side covering shall be made in one piece, extending around all four sides, and overlapping at the rear of the booth not less than eighteen inches, so as to form a flap doorway. The side covering shall extend from top pipes—to which it shall be suspended by approved metal hooks or rings, spaced not more than twelve inches apart—to the floor, with a flap of not less than three inches all around resting on the floor. The metal hooks or rings, for suspending the side covering, shall be attached to the hem of the

cloth by means of a metal strap and two rivets. The side covering shall be drawn down tight and secured to the bottom pipe frame by means of asbestos tie cords. The cloth covering for top and sides must, at all times, be kept free from rents or holes, and be maintained in good condition.

Door.

The side covering shall overlap eighteen inches in the rear of the booth. This overlap shall extend from top to bottom, and shall be so arranged as to form a means of entrance and egress.

Flooring.

The frame shall be placed on a mat or carpet made of approved asbestos cloth, not less than seven feet square. This mat must be spread out smoothly on a substantial floor or platform, so that it shall extend one foot from the frame on all sides. This mat must at all times be kept free from rents or holes, and in good condition.

Ventilation.

The top of the frame shall be fitted at the rear with a hinged ventilator trap, as described in foregoing section of frame. The asbestos cloth top covering shall be so arranged, and so attached to the frame, that, when the hinged trap is raised, the asbestos covering shall be raised also in the rear. Suitable devices shall be supplied for maintaining this ventilator trap in a lifted position, so as to form a clear ventilating space, at the rear, or not less than six inches high, extending across the full width of the booth.

Windows.

The look-out window for the operator shall be not more than four inches wide and twelve inches high. The windows for the machine shall not be more than six inches high and twelve inches long. All windows shall be located and cut after machine is set up.

The openings shall be cut in the cloth with care, and the edges reinforced by stitched hem of asbestos cloth; they shall be provided with asbestos flaps, securely stitched at the top of the openings. These flaps, when closed, shall overlap the window opening at least two inches on the bottom and sides, and shall be weighted across the bottom edge by a piece of three-eighth inch pipe, or equal weight of metal, securely sewed in the pocket in the cloth.

Window Shutters and Ventilator Trap.

The window flaps or shutters are to be held open normally, by the use of a fine combustible cord. The hinged ventilator trap is to be raised, for ventilation, not more than six inches at the rear, and shall be held open by a collapsible prop sustained by fine combustible cord. The cord from the window shutters and the ventilator prop shall be in series with a fusible link and also approved tension-clip, so arranged that the automatic opening of the link, or release of the tension clip by the operator, will insure the immediate closing of all openings by the dropping of the flaps and the ventilator trap. This fusible link and tension clip shall be arranged in a position directly over the machine, within reach of the operator.

Provided, however, That portable booths or enclosures shall not be permitted to be used in any theatre or public hall in which permanent booths or enclosures have been installed; it being the intention of this section that portable booths or enclosures shall be used only for temporary exhibitions of moving-pictures in places of assemblage—such as schools, churches, association halls, lodge-rooms, theatres—without permanent booths: Provided, That this section shall not apply to cities of the first and second classes.

Section 3. It shall be the duty of the Department of Factory Inspection, by and through its Chief Factory Inspector, his deputy or deputies, to take such means as it may deem necessary to enforce the provisions of this statute. It shall be the duty of said Chief Factory Inspector, his deputy or deputies, within a reasonable time after the approval of this act, to inspect all booths or enclosures in which moving-pictures are now being operated; and should any be found in a dangerous condition, in that they lack adequate fire protection, he or they shall immediately order the abatement and discontinuance of such use of such booth and enclosure. The owner, agent, superintendent, person or persons, in charge and control of said booth or enclosure, shall abate and discontinue the use of same within ten days after the service of the notice of abatement or discontinuance. Any such person or persons, who shall fail to comply with the said order of abatement or discontinuance, so issued as aforesaid, shall be deemed guilty of a misdemeanor, and, on conviction, shall be punished by a fine of not less than twenty-five dollars and not more than five hundred dollars, or an imprisonment in the county jail for a term of not less than ten days nor more than ninety days, within the discretion of the court, for each and every such violation.

Section 4. Any person or persons who violate or ignore any of the provisions of sections one and two of this act shall be deemed guilty of misdemeanor, and on conviction thereof shall be punished by a fine of not less than fifty dollars and not more than five hundred dollars, or an imprisonment in the county jail for a term of not less than ten days nor more than ninety days, for each and every violation. In all cases of violation of sections one and two of this act, the prosecutions shall be instituted in the name of the Commonwealth by the Chief Factory Inspector, his deputy or deputies, and hearing shall be conducted by the alderman, justice of the peace, or other committing magistrate before whom the information is lodged; after full hearing of the parties in interest, the alderman, justice of the peace or other committing magistrate shall, if the evidence warrants it, impose the penalty herein provided, which shall be final to the party against whom the penalty is imposed, unless the said party shall furnish good and sufficient bail for his or her appearance at the next term of the court of quarter sessions of the county wherein the offense is alleged to have been committed.

Section 5. All fines imposed and collected for any violation of this act shall be forwarded to the Chief Factory Inspector, who shall pay the same into the office of the State Treasurer, for the use of the Commonwealth of Pennsylvania.

REPORT OF ACCIDENTS ACT OF JULY 19, 1913.

(Pamphlet Laws, page. 843. No. 408.)

AN ACT

Requiring employers to make report to the Department of Labor and Industry of accidents to employes, and prescribing a penalty for non-compliance therewith.

Section 1. Be it enacted, &c., That within thirty days after the beginning of the disability of an employe because of any personal injury, caused by an accident occurring in the course of his employment, the employer, whether a person, firm, or corporation, shall make report of such accident to the Department of Labor and Industry. Such report shall set forth the name, address, and nature of the business of the employer; name, address, sex, age, nationality, and occupation of the employe; date, day of week, hour, place, and character of the accident, and the nature of the injury, and the duration of the disability, or probable disability, as far as the same can be ascertained. Such employer shall, also, upon request of the Department of Labor and Industry, make such further report as may reasonably be required by it.

Section 2. Any person, firm, or corporation having knowledge of the occurrence of such personal injury to an employe, in the course of employment, who shall fail to make report as aforesaid, shall be liable to the Commonwealth for a penalty of one hundred dollars to be recovered by action brought by said department.

Section 3. Reports made in accordance with this act shall not be evidence against the employer in any proceeding, either under the Workmen's Compensation Law of one thousand nine hundred and thirteen or otherwise.

Section 4. No employer who has made the report required by this act shall be required to make any other or further report of such accident to any other department of the government of the Commonwealth.

Section 5. This act shall not apply to casual employments; nor to accidents resulting in disability continuing less than two days.

WIRE-GLASS ACT OF MAY 20, 1913.

(Pamphlet Laws, page 272. No. 190.)

AN ACT

Regulating the openings of buildings, upon, over, or under external fire-escapes.

Section 1. Be it enacted, &c., That all exits to external fire-escapes shall be by means of doors of fire proof construction, in which doors there may be placed wire-glass, if glass is required for lighting the interior; and all windows, hereafter opening upon, over,

or under external fire-escapes, shall be of fire-proof construction, with wire-glass therein, and with metal fire-proof frames around the windows.

Section 2. Every person, firm, or corporation, trustee, board of education, and board of school directors, or any person or persons having charge, either as agents, trustees, or as a commission, having charge of any building, neglecting or refusing to comply with section one of this act, shall be deemed guilty of a misdemeanor, punishable by a fine of not more than three hundred dollars, or an imprisonment for not more than two months, or either or both, within the discretion of the court: Provided, That nothing in this act shall interfere with fire-escapes, now in use, approved by the proper authorities.

WOMAN'S ACT OF JULY 25, 1913.

As Amended 1915.

(Pamphlet Laws, 1913, page 1024. No. 466; 1915, page No.....)

AN ACT

To protect the public health and welfare, by regulating the employment of females in certain establishments, with respect to their hours of labor and the conditions of their employment; by establishing certain sanitary regulations in the establishments in which they work; by requiring certain abstracts and notices to be posted; by providing for the enforcement of this act by the Commissioner of Labor and Industry and others; by prescribing penalties for violations thereof; by defining the procedure in prosecutions; and by repealing all acts and parts of acts inconsistent with the provisions thereof.

- SECTION 1. DEFINITIONS: ESTABLISHMENT, PERSON, WEEK, DAY.
- SECTION 2. INCLUSION OF PLURAL AND ALL GENDERS.
- SECTION 3. HOURS OF LABOR.
- SECTION 4. NIGHT WORK: PROHIBITION IN MANUFACTURING ESTABLISHMENTS.
- SECTION 5. NIGHT WORK: PROHIBITION, FEMALES UNDER TWENTY-ONE.
- SECTION 6. MID-DAY MEAL PERIODS.
- SECTION 7. INTERVALS BETWEEN WORK PERIODS.
- SECTION 8. SEATS.
- SECTION 9. WASH- AND DRESSING-ROOMS, WATER-CLOSETS.
- SECTION 10. LUNCH ROOMS IN CERTAIN ESTABLISHMENTS.
- SECTION 11. EXHAUST FANS IN CERTAIN ESTABLISHMENTS.
- SECTION 12. DRINKING WATER.
- SECTION 13. ENFORCEMENT: POSTING ABSTRACT OF THIS ACT AND SCHEDULE OF HOURS OF LABOR; PREPARATION AND DISTRIBUTION OF ABSTRACTS AND FORMS OF SCHEDULE.
- SECTION 14. ENFORCEMENT: PROOF OF AGE OF CERTAIN FEMALES.
- SECTION 15. ENFORCEMENT: HINDERING OR DELAYING FACTORY INSPECTORS.
- SECTION 16. ENFORCEMENT: BY THE FACTORY INSPECTORS.
- SECTION 17. PROSECUTION: PROCEDURE, APPEALS.
- SECTION 18. PENALTIES: FIRST AND SECOND OFFENSES. CONTINUED VIOLATIONS. EXEMPTIONS OF PERSONS FROM PUNISHMENT UNDER CERTAIN CIRCUMSTANCES.
- SECTION 19. DISPOSITION OF FINES.
- SECTION 20. CONSTRUCTION OF THE ACT NOT TO AFFECT INDUSTRIAL TRAINING OR OTHER EDUCATION; UNCONSTITUTIONALITY OF A PART OF THE ACT.
- SECTION 21. ACTS REPEALED.
- SECTION 22. DATE OF OPERATION.

Definitions: Establishment, Person, Week, Day.

Section 1. Be it enacted, &c., That the term "establishment," when used in this act, shall mean any place within this Commonwealth where work is done for compensation of any sort, to whomsoever payable: Provided, That this act shall not apply to work in private homes and farming.

The term "person," when used in this act, shall be construed to include any individual, partnership, or other unincorporated association, corporation, and municipality.

The term "week," when used in this act, shall mean any seven consecutive days, and the term "day" shall mean any twenty-four consecutive hours.

Inclusion of Plural and all Genders.

Section 2. Whenever in this act the singular is used the plural shall be included, and whenever the masculine gender is used the feminine and neuter shall be included.

Section 3. (a) No female shall be employed or permitted to work in, or in connection with, any establishment for more than six days in any one week or more than fifty-four hours in any one week, or more than ten hours in any one day: Provided, That during weeks in which a legal holiday occurs and is observed by an establishment, any female may be employed by such establishment during three days of such week for a longer period of time than is allowed by this act; but no female shall be permitted to work more than two hours overtime during any one of such three days, nor more than the maximum hours per week specified in this act.

The employment of such persons at any other time than as stated herein shall be deemed a violation of the provisions of this section, unless it appears that such employment was to make up time lost in the same week in consequence of the alteration, repairs or accidents to machinery or plant, upon which she was employed and dependent for employment; but no stopping of machinery for less than thirty consecutive minutes shall justify such overtime employment, nor shall such overtime employment be legal unless a written report of the same be sent to the Commissioner of Labor and Industry; but no female shall be permitted to work more than two hours overtime during any one day, nor more than the maximum number of hours per week specified in this act: Provided, That aforesaid restrictions as to hours shall not apply to females engaged in the canning of fruit and vegetable products: *And provided further, That the one day of holiday in seven may be subdivided into two days of twelve hours each, for women employes in hotels, boarding houses, and in charitable, educational and religious institutions, at the discretion of the Industrial Board of the Department of Labor and Industry: Provided, That if it should be hereafter held by the courts of this Commonwealth that the power herein sought to be granted to the said board is, for any reason, invalid, such holding shall not be taken in any case to affect or impair the remaining provisions of this section.*

(b) Whenever any female shall be employed or permitted to work in, or in connection with, more than one establishment in any one

week or in any one day, the aggregate number of hours during which she shall be employed or permitted to work in, or in connection with, such establishment shall not exceed the number of hours prescribed in this section for such females in any one week or any one day.

(c) The provisions of this section shall not apply to the work of nurses in hospitals.

(The foregoing section is as amended by the Act of June 1, 1915, Pamphlet Laws, page 709, No. 327, the portion added by the amendment being indicated by italics.)

Night-Work; Prohibition, Females under Twenty-one.

Section 5. No female under twenty-one years of age shall be employed or permitted to work in, or in connection with, any establishment before the hour of six o'clock in the morning or after the hour of nine o'clock in the evening of any day. Provided, That this section shall not apply to females over the age of eighteen years employed as telephone operators.

Mid-Day Meal Period.

Section 6. Not less than forty-five minutes shall be allowed to every female employed or permitted to work in, or in connection with, any establishment, for the mid-day meal, which period shall not be considered a part of the hours of labor: Provided, That whenever any female shall be employed or permitted to work in, or in connection with, any establishment for less than eight hours in any one day, the time allowed for the mid-day meal may be reduced to not less than thirty minutes.

Employes shall not be required to remain in the work-rooms during the time allowed for meals.

Intervals Between Work Periods.

Section 7. No female shall be employed or permitted to work for more than six hours continuously in, or in connection with, any establishment, without an interval of at least forty-five minutes, and no period of less than forty-five minutes shall be deemed to interrupt a continuous period of work: Provided, That whenever any female shall be employed or permitted to work in, or in connection with, any establishment for less than eight hours in any one day, the interval between work-periods may be reduced to not less than thirty minutes.

Employes shall not be required to remain in the work rooms during the rest periods required by this section.

Seats.

Section 8. Every person employing or permitting females to work in any establishment shall provide suitable seats for their use in the rooms where they shall work, and shall maintain and keep them there, and shall permit the reasonable use thereof by such females. At least one seat shall be provided for every three females employed or permitted to work, and all seats shall during working hours be conveniently accessible to the workers for whose use they shall be provided.

Wash and Dressing-Rooms. Water Closets.

Section 9. Every person employing or permitting females to work in any establishment shall provide suitable wash and dressing-rooms and water-closets, or privies, for their use, so located as to be accessible to such females. In any establishment in which males and females shall be employed or permitted to work, separate wash and dressing-rooms and water-closets, or privies, shall be provided for each sex; and such wash and dressing-rooms and water-closets, or privies, for each sex, shall be entirely separate from those provided for the other sex. The water-closets or privies provided for females shall be in the ratio of one for every twenty-five females employed or permitted to work. All water-closets or privies shall be properly lighted, and shall be separated from the rooms in which employes shall be permitted to work by partitions extending from floor to ceiling, and the compartments containing such water-closets or privies shall have sufficient direct outside ventilation, by window or other means. The entrances to the water-closets or privies shall be screened from the rooms in which employes work, and from the entrances to the water-closets or privies provided for the other sex, by screens or partitions at least six feet high. All water-closets or privies shall at all times be kept clean, sanitary, and free from all obscene writing or marking.

Lunch Rooms in Certain Establishments.

Section 10. Any person employing or permitting any female to work in any establishment where white lead, arsenic or other poisonous substances, or injurious fumes, dust or gases, shall be present, shall provide and maintain a suitable room, free from the aforesaid substances, fumes, dust and gases, for the use of said female employes; and no such person shall, during the time allowed for meals, permit any such female to remain in any room where the aforesaid substances, fumes, dust, and gases shall be present.

Exhaust-Fans in Certain Establishments.

Section 11. Any person who shall employ or permit any female to work in any establishment in which poisonous or injurious dust, fumes, or gases shall be created by the machinery or material in process of manufacture, shall provide proper hoods and pipes connected with exhaust-fans of sufficient capacity to remove such dust, fumes or gases at their point of origin, and prevent them from mingling with the air in the room, and such fans shall be kept running constantly while such dust, fumes, or gases shall be generated.

Drinking-Water.

Section 12. Any person employing any female in any establishment shall make reasonable efforts to at all times provide a sufficient supply of clean and pure drinking-water. Such water shall be supplied through proper pipe connections with water-mains which furnish water for domestic purposes, or from a spring or well, or body of pure water. If drinking water be placed in receptacles in the establishment, such receptacles shall be properly covered to

prevent contamination, and shall at all times be kept thoroughly clean: Provided, That no employer in any establishment shall collect from any such female employe any money for ice furnished in his establishment for drinking purposes, for the use of the employes.

Enforcement: Posting Abstract of This Act and Schedule of Hours of Labor; Preparation and Distribution of Abstracts and Forms of Schedule.

Section 13. Every person employing or permitting any female to work in any establishment shall keep posted in a conspicuous place in the room where such female shall be employed or permitted to work, a printed abstract of the provisions of this act, and a schedule of the hours of labor of such female: Provided, That when any female shall be employed or permitted to work in more than one room in any establishment, the aforesaid abstract and schedule shall be required in only one of the said rooms. If any female shall be employed or permitted to work in connection with any establishment, but not in such establishment, the aforesaid abstract and schedule shall be kept posted in a conspicuous place in the office of such establishment.

The schedule of hours of labor herein required shall contain the name of the female employed or permitted to work, the maximum number of hours such female shall be required or permitted to work on each day of the week, with the total for the week, the hours of commencing and stopping work, and the hours when the time allowed for meals shall begin and end for each day of the week. Such female may begin work after the time for beginning, and stop before the time for ending work, stated in such schedule; but she shall not otherwise be employed or permitted to work in, or in connection with, any establishment, except as stated in such schedule.

The Commissioner of Labor and Industry shall prepare the abstract of the provisions of this act, and a form for the schedule of hours of labor required by this section. Copies of such abstract and such form shall be printed, in accordance with the laws of this Commonwealth regulating printing and publishing, under the supervision of the Superintendent of Public Printing and Binding, and the Commissioner of Labor and Industry shall supply the same, upon application, to all persons required to post the abstract and schedule aforesaid.

Enforcement: Proof of Age of Certain Females.

Section 14. Whenever any female shall be employed or permitted to work in, or in connection with, any establishment, before the hour of six o'clock in the morning or after the hour of nine o'clock in the evening of any day, who, in the judgment of the Commissioner of Labor and Industry or his deputy, is under twenty-one years of age, such officer may demand from any person employing or permitting any such female to work in, or in connection with, his establishment, that such person shall either furnish to such officer within ten days satisfactory evidence, such as shall be required by law for the issuing of employment certificates to minors, that such female is, in fact, twenty-one years of age or over, or shall cease to employ

or permit such female to work in, or in connection with, such establishment, before or after the hours above named. In case such employer shall fail to furnish to said officer, within ten days after making such written demand, the required evidence of age, and shall thereafter continue to employ such female, or permit her to work in, or in connection with, such establishment, before or after the hours aforesaid, proof of the making of such demand and of failure to produce the evidence required shall be prima facie evidence of the illegal employment of such female, in any prosecution brought therefor.

Enforcement: Hindering or Delaying Commissioner of Labor and Industry or His Deputies.

Section 15. No person shall hinder or delay the Commissioner of Labor and Industry or any of his deputies in the performance of his duties in the enforcement of this act, or refuse to admit, or lock out, any inspector from any place while females are employed therein, and which said inspector shall be authorized to inspect, or refuse to give any inspector information required for the proper enforcement of this act.

Enforcement: By the Commissioner of Labor and Industry and His Deputies.

Section 16. It shall be the duty of the Commissioner of Labor and Industry and his deputies to enforce all the provisions of this act. They shall visit and inspect establishments, and shall have power at any reasonable time to visit and inspect any establishment in or in connection with which any female shall be employed or permitted to work. They shall investigate all complaints of violations of this act received by them, and shall institute prosecutions for violations of the provisions thereof.

Prosecutions: Procedure, Appeals.

Section 17. All prosecutions for violations of this act shall be instituted by the Commissioner of Labor and Industry or his deputy, before a magistrate, alderman, or justice of the peace, who shall issue a summons commanding the person charged with a violation of the act to appear within not less than five nor more than eight days. Upon a conviction after hearing, the penalties provided in this act shall be imposed, and shall be final, unless an appeal be taken to the court of proper jurisdiction, within twenty days after the imposition of the penalties aforesaid, in the manner already provided by law in appeals from penalties.

Penalties: First and Second Offenses, Continued Violations, Cumulative Penalties, Exemptions of Persons from Punishment Under Certain Circumstances.

Section 18. Any person who, whether by himself or for another, or through an agent, servant or foreman, shall violate any provision of this act, shall be guilty of a misdemeanor.

Upon conviction for a violation of any provision of sections three, four, five, six, or seven of this act, he shall be punished, for a first offense, by a fine of not less than ten (\$10) dollars or more than fifty (\$50) dollars; for a second or subsequent offense, by a fine of not less than twenty-five (\$25) dollars nor more than two hundred (\$200) dollars, or by imprisonment for not more than sixty days, or by both, at the discretion of the court; and whenever any person shall have been notified by the Commissioner of Labor and Industry or his deputy, or by the service of a summons in a prosecution, that he is violating such provision, he shall be punished by like penalties in addition for each and every day that such violation shall have continued after such notification.

Upon conviction for a violation of any of the provisions of sections eight, nine, ten, eleven, twelve, thirteen, fourteen, or fifteen of this act, the punishment shall be, without regard to the number of females employed, for a first offense, not less than twenty-five (\$25) dollars nor more than fifty (\$50) dollars; for a second or subsequent offense, a fine of not less than fifty (\$50) dollars nor more than two hundred (\$200) dollars, or imprisonment for not more than sixty days, or both at the discretion of the court, and whenever any person shall have been notified by the Commissioner of Labor and Industry or his deputy that he is violating such provisions, and shall have been given a reasonable time in which to remedy the condition which shall constitute such violation, he shall be punished, in addition to the penalties aforesaid, by like penalties for each and every day that such violation shall have continued after the expiration of the time allowed by the Commissioner of Labor and Industry or his deputy for remedying the aforesaid condition: Provided,—

First. That any person who shall demand evidence, such as shall be required by law for the issuing of employment certificates to minors, that any applicant for employment or permission to work in, or in connection with, his establishment, is twenty-one years of age, and shall receive the same before employing or permitting such applicant to work, and who shall have kept the same on file, and, in the case of such applicant, shall have complied with all the requirements of this act applying to a female of the age stated in such evidence of age, shall not be liable to punishment for the violation of section five of this act, though it shall subsequently appear that such applicant was in fact less than twenty-one years of age: Provided, That this provision shall not apply to any person who shall demand and receive the evidence herein provided for, if he knows at the time of receiving such evidence that the applicant is, in fact, less than twenty-one years of age; nor shall this provision prevent the punishment of any person for violating section five of this act after knowledge of the true age of the female employed.

Second. That whenever a violation of any provision of this act shall also be a violation of another provision, or other provisions, of this act, penalties may be imposed for the violation of each and every such provision.

Third. That under no circumstances shall any person be sentenced to imprisonment for more than one year for any one violation of this act.

Fourth. That whenever a violation of any of the provisions of this act shall also be a violation of the laws of this Commonwealth regulating the hours of labor and conditions of employment of minors, penalties shall be imposed under only one of such acts.

Disposition of Fines.

Section 19. All fines imposed and collected for any violation of this act shall be forwarded to the Commissioner of Labor and Industry, who shall pay the same into the office of the State Treasurer for the use of the Commonwealth.

Construction of the Act not to Affect Industrial Training or Other Education; Unconstitutionality of a Part of the Act.

Section 20. Nothing in this act shall be construed to prevent females of any age from receiving industrial training or other education in, or in connection with, any school or educational institution in this Commonwealth.

Each section of this act and every part thereof is hereby declared to be an independent section, or part of a section, and if any section, sub-section, sentence, clause, or phrase of this act shall for any reason be held unconstitutional, the validity of the remaining phrases, clauses, sentences, subsections, and sections of this act shall not be affected thereby.

Acts Repealed.

Section 21. The following acts, or parts of acts, are hereby repealed:

The act entitled "An act for the preservation of the health of female employes in manufacturing, mechanical, and mercantile establishments," approved the twenty-second day of March, Anno Domini eighteen hundred and eighty-seven (Pamphlet Laws, eighty-seven).

Section ten of the act entitled "An act to regulate the employment and provide for the safety of women and children in manufacturing establishments, mercantile industries, laundry or renovating establishments; and to provide for the appointment of inspectors to enforce the same and other acts providing for the safety or regulating the employment of said persons," approved the third day of June, Anno Domini eighteen hundred and ninety-three (Pamphlet Laws, two hundred and seventy-six).

Sections four and eight of the act entitled "An act to regulate the employment and provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works, or printing offices; and to provide for the appointment of inspectors, office clerks, and others to enforce the same," approved the twenty-ninth day of April, Anno Domini eighteen hundred and ninety-seven (Pamphlet Laws, thirty).

Sections six and ten of the act entitled "An act to regulate the employment and provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works, or printing offices, and provide for the safety of men, women and children, and children in hotels, school buildings, seminaries, colleges, academies, hospitals, storehouses, public halls, and places of amusement, by requiring proper fire-

escapes; and to provide for the appointment of inspectors, office clerks and others to enforce the same," approved the twenty-ninth day of May, Anno Domini nineteen hundred and one (Pamphlet Laws, three hundred and twenty-two).

Sections three, seven and eight of this act entitled "An act to regulate the employment, in all kinds of industrial establishments, of women and children employed at wages or salary, by regulating the age at which minors can be employed and the mode of certifying the same, and by fixing the hours of labor for women and minors; to provide for the safety of all employes in all industrial establishments, and of men, women and children, in school-houses, academies, seminaries, colleges, hotels, hospitals, storehouses, office buildings, public halls, and places of amusement, in which proper fire-escapes, exits, and extinguishers are required; to provide for the health of all employes, and of men, women and children in all such establishments, storehouses, and buildings, by proper sanitary appliances; and to provide for the appointment of inspectors, office clerks and others, who, with the Chief Factory Inspector, shall constitute the Department of Factory Inspection, to enforce the same; and providing penalties for violations of the provisions thereof; fixing the term and salaries of the Chief Factory Inspector and his appointees," approved the second day of May, Anno Domini nineteen hundred and five (Pamphlet Laws, three hundred and fifty-two).

The following acts, or parts of acts, are hereby repealed in so far as they are inconsistent with the provisions of this act:

Section two of the act entitled "An act for the relief of the heirs of James Caldwell, deceased, and relative to the hours of labor in manufacturing establishments," approved the twenty-first day of April, Anno Domini one thousand eight hundred and forty-nine (Pamphlet Laws, six hundred and seventy-one).

Sections one and two of the act entitled "An act to limit the hours of labor constituting a day's work in this State to eight hours," approved the fourteenth day of April, Anno Domini one thousand eight hundred and sixty-eight (Pamphlet Laws, ninety-nine).

Section eleven of the act entitled "An act to regulate the employment and provide for the safety of women and children in manufacturing establishments, mercantile industries, laundry or renovating establishments, and to provide for the appointment of inspectors to enforce the same, and other acts providing for the safety or regulating the employment of said persons," approved the third day of June, Anno Domini one thousand eight hundred and ninety-three (Pamphlet Laws, two hundred and seventy-six).

Sections one and nine of the act entitled "An act to regulate the employment and provide for the health and safety of men, women and children in manufacturing establishments, mercantile industries, laundries, renovating works, or printing offices; and to provide for the appointment of inspectors, office clerks, and others to enforce the same," approved the twenty-ninth day of April, Anno Domini one thousand eight hundred and ninety-seven (Pamphlet Laws, thirty).

Sections one and eleven of the act entitled "An act to regulate the employment and provide for the health and safety of men, women, and children in manufacturing establishments, mercantile industries, laundries, renovating works, or printing offices; and provide for the

safety of men, women and children in hotels, school buildings, seminaries, colleges, academies, hospitals, storehouses, public halls, and places of amusement, by requiring proper fire-escapes; and to provide for the appointment of inspectors, office clerks, and others to enforce the same," approved the twenty-ninth day of May, Anno Domini nineteen hundred and one (Pamphlet Laws, three hundred and twenty-two).

The act entitled "An act prohibiting athletic exhibitions of longer duration than twelve hours in each calendar day," approved the eleventh day of April, Anno Domini nineteen hundred and three (Pamphlet Laws, one hundred and sixty-six).

Sections nine and ten of the act entitled "An act to regulate the employment in all kinds of industrial establishments of women and children employed at wages or salary, by regulating the age at which minors can be employed and the mode of certifying the same, and by fixing the hours of labor for women and minors; to provide for the safety of all employes in all industrial establishments, and of men, women, and children in school-houses, academies, seminaries, colleges, hotels, hospitals, storehouses, office buildings, public halls, and places of amusement, in which proper fire-escapes, exits, and extinguishers are required; to provide for the health of all employes, and of men, women, and children in all such establishments, storehouses, and buildings, by proper sanitary appliances; and to provide for the appointment of inspectors, office clerks, and others, who, with the Chief Factory Inspector, shall constitute the Department of Factory Inspection, to enforce the same; and providing penalties for violations of the provisions thereof; fixing the term and salaries of the Chief Factory Inspector and his appointees," approved the second day of May, Anno Domini nineteen hundred and five (Pamphlet Laws, three hundred and fifty-two).

Section five of the act entitled "An act to provide for health and safety of minors in certain employments, by regulating the ages at which said minors may be employed, their hours of employment, their protection against injury, and to prescribe rules for the obtaining of employment certificates, and providing penalties for violation of the provisions thereof, approved the twenty-ninth day of April, Anno Domini nineteen hundred and nine (Pamphlet Laws, two hundred and eighty-three).

And all other acts or parts of acts, not herein particularly specified, which are inconsistent with the provisions of this act.

Date of Operation.

Section 22. Except as herein otherwise provided, this act shall take effect on the first day of November, Anno Domini nineteen hundred and thirteen.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



A BULLETIN OF INFORMATION FOR THE PUBLIC

OCTOBER, 1916.

HARRISBURG, PA.:
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1916

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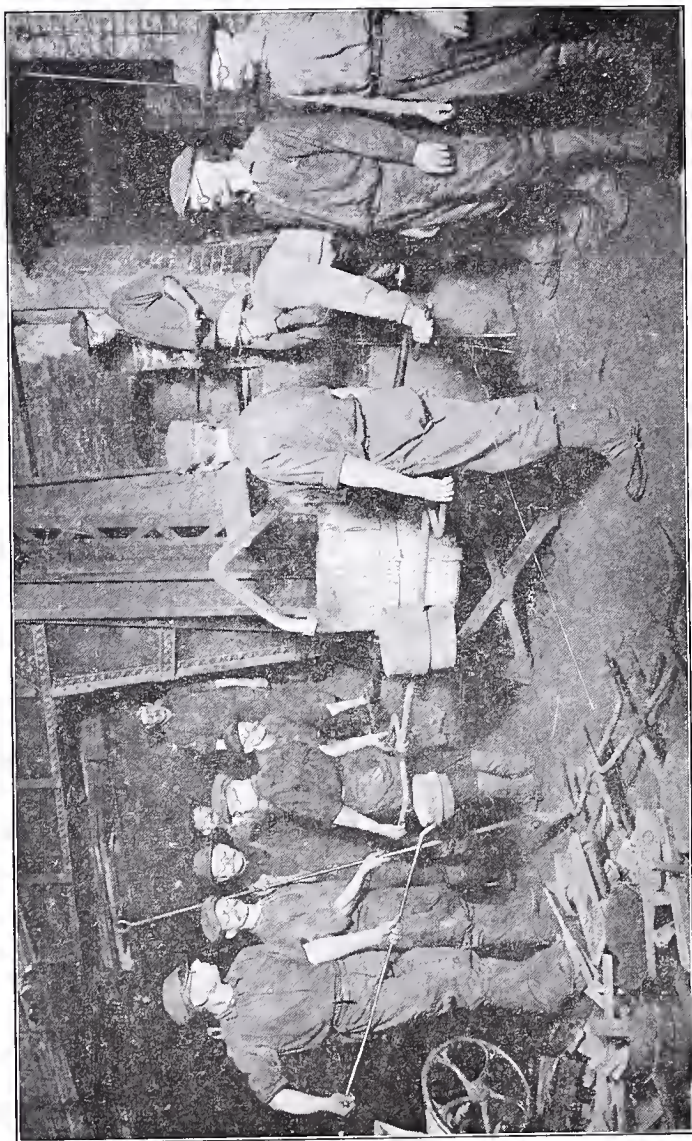
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Goggles and leggings in the foundry protect eyes and feet from splashing molten iron. Note the protection afforded by the cape of the legging extending over the foot. Read the article on page 41. Illustration by courtesy of William Sellers & Co., Inc., Philadelphia.

ACTIVITIES OF THE INDUSTRIAL BOARD DURING THE
EIGHTEEN MONTHS, FROM JANUARY 1, 1915, TO JULY 1,
1916.

By MRS. SAMUEL SEMPLE, *Member of Board.*

To investigate and report upon all matters touching the enforcement and effect of the provisions of all laws of the Commonwealth whose enforcement is now, or shall hereafter be, imposed upon the Department of Labor and Industry; to make, alter, amend, or repeal general rules and regulations which shall specify means, methods, and practices for carrying those laws into effect; to observe the effect of the regulations, as well as of the laws which they supplement; to personally investigate establishments in this Commonwealth where labor is employed when first-hand knowledge is needed for intelligent work; to hold public hearings on any points in these processes which present different phases of opinion; and to hold regular meetings for executive handling of all of this business,—this is the task laid down for the Industrial Board of Pennsylvania in the legislative act of 1913 which created it a part of the reorganized Department of Labor and Industry.

A more complete perception of the duties of the Board is obtained from the recollection that the Department of Labor in general, through its five Bureaus is charged with the work of securing statistics and information concerning industrial conditions in the State; of adjusting the basis of compensation for industrial accidents; of attempting to bring together "the manless job, and the jobless man," of giving service in arbitrating labor difficulties; and of endeavoring to bring labor conditions into harmony with the declaration of the law that all rooms, buildings, and places in this Commonwealth where labor is employed, or shall hereafter be employed, shall be so constructed, equipped, and arranged, operated and conducted in all respects as to provide for the reasonable and adequate protection for the life, health, safety, and morals of all persons employed therein.

Against this background the legislative assignment for the Industrial Board seems to place it in the double role of official conscience to the Department of Labor and Industry, regarding its established work, and of pathfinder concerning the Department's future duties and obligations.

With these points in mind there is presented herewith an analysis of the work of the Board from January, 1915 to July, 1916.

Conditions Learned Through Hearings and Investigations.

It is quite in harmony with the evident intention as to the work of the Board that the emphasis during this period should have fallen beyond dispute upon the desire to know. The evidence of this is found in the series of hearings on various subjects that have been held before the Board, and upon the corresponding series of personal investigations undertaken by the Board.

The hearings have fallen into two groups—those concerning the operation of laws and regulations already in force, and those on codes of safety regulations under discussion. Concerning the latter group it may be stated that by many it is considered the most important work of the Board. The toll that industry takes from labor in Pennsylvania in accidents to life and limb is enormous. The careful working out of safety devices, and ways and means of conducting industry so as to lessen these dangers, is a matter of prime importance to the Commonwealth, whether one looks at it as an aid to uninterrupted industrial processes, or as a service to the humanity for which the State exists.

The policy of the Industrial Board in creating such standards has from the beginning been that of seeking and using the co-operation of industrial leaders. Practical men of business have gathered at the invitation of the Board to give constructive criticisms on the safety codes under compilation. Expert advice has thus been at the service of the State; and, in addition, the hearings have served the purpose of educational conferences among the leaders of the businesses under discussion. Looked at in this way, the hearings on codes of safety standards governing bakeshops, foundries, canneries, cereal mills, boilers, ladders, and elevators which were held before the Board, during the eighteen months in question, cease in the retrospect to be lengthy presentations of trade technicalities, and take their true perspective as occasions of vital interest to the people and industries of Pennsylvania.

In common with the experience of the previous year in such hearings, it was found that the hardest points to settle right were those of comparatively minor importance. It was easy to decide that the Boiler Code of the A. S. M. E. was, as a whole, worthy of the confidence of Pennsylvania; but just where the boiler inspection certificate of a traction engine should be placed was a nut that it took some time to crack. Millers in a convention hearing were a unit as to the fire risk in cereal dust; but whether grenades or salt water

should be at hand to counteract that risk offered a field for wide divergence of opinion.

Proprietors of canneries agreed readily as to safety regulations for machinery and gears; there was harmony as to the necessity for scalding all equipment for handling of foods; but when it came to the question of curtailing the right of the individual to use tobacco, and to spit when, and where, and as he pleased, the Board discovered that the proposed code was in danger of finding itself upon the shoals. Be it recorded to the credit of these men, who unselfishly assisted the State by their knowledge and advice at these hearings, that such minor points were, in practically all instances, discussed in frankness and good spirit; and that the conclusions finally reached carried the majority representing the business in question.

Safety Codes Adopted and Studies Made.

Codes actually adopted during this period were on fire prevention, canneries, boilers, elevators, foundries, ladders, cereal mills, and lighting, making a total of sixteen standards issued by the Industrial Board of Pennsylvania up to July 1st, 1916.

In addition, a tentative code was adopted for practical experiment on means of egress and a building code, the monumental work of a Commission which reported to the last legislature, was prepared for printing and distribution for study and discussion.

The Board also took steps toward co-operation with other states to bring about uniformity of codes operating over wide territories, thereby reducing confusion in business standards.

Certain types of industrial machinery are so complicated that satisfactory guards have never yet been made for them. Notably in this class are certain textile looms. The Board has been unable to present safety standards for these machines; but during 1915, thanks to the co-operation of textile manufacturers, it made a great advance in this direction. Experiments were undertaken in guarding in different textile mills, thereby working toward definite standards. The experiments were sufficiently satisfactory in the lace industry for the Department to extend their actual trial to all the lace mills in the State. The standards which will result from these experiments may be expected to be entirely practical; and Pennsylvania, by this aid from her manufacturers, will thereby become a pioneer in certain forms of safety work.

Certain codes have been in operation for a sufficient length of time to show their imperfections in practice; and such have been amended either upon expert recommendations, or as a result of hearings granted to complainants.

The codes on foundries and on power transmission were in the first class; and that on bakeshops in the second. The inspection law governing bakeshops in Pennsylvania clearly contemplates a sanitary bakeshop, presumably for the benefit of the public, as well as for the health and welfare of the workers. It seems a simple thing to rule on conditions that shall meet both these requirements; and were Pennsylvania a new state it would be an easy matter to keep bakeshops above ground, light, and well ventilated. But in one of the oldest Commonwealths of the nation, with cities and towns built before the Revolution, with involved property interests, and in many places a congested foreign-born population of intensely individualistic social conceptions, the bakeshop has proved to be one of the most difficult problems presented to the Industrial Board, and to the Inspection Bureau of the Department of Labor and Industry. "We have no real troubles except the bakeshops," sighed a wearied giant of inspection as he told of bake ovens surreptitiously installed in dark basements; and of damp cellar shops made damper by being dug lower still to meet the code's requirement as to height of ceilings.

The guiding thought of the Board in wrestling with this problem has been the eventual elimination of the cellar bakeshop as the surest way to better conditions in this industry. Yet this thought has not been allowed to obscure the desire to deal justly and kindly by those engaged in an honorable and essential business, and who are entangled in conditions for which they are not entirely responsible. The time by which the cellar bakeshop must go has been set at 1920. The Board felt that that interval would allow time for readjustment that should prevent hardship.

Fire Protection, A Vital Subject.

To anyone who reads the record of the Industrial Board's proceedings during its existence, one subject plays the part of Banquo's ghost, who will not down—that of fire protection. On that depends much of the safety of the industrial workers, and on that, much of the work and vigilance of the Inspection Bureau is necessarily expended. Even limited as it is in Pennsylvania by the fact that fire risk in first and second class cities is a matter of municipal, not of state, responsibility, fire risk is a constant anxiety to the Department.

Although this is not generally recognized, the very definiteness of the law curtails somewhat the work of the Board on this subject. As a first step toward bringing about a better understanding of the situation, the Board communicated with the proper departments in first and second class cities in the Commonwealth, calling attention

to the fact that the law places fire risk responsibilities in those instances directly upon the municipality, not upon the State. It was agreed that the inspectors of the Department of Labor and Industry, in performing their specified duties in cities of the first and second class, should also note carefully the conditions of fire risk; should report them immediately to the proper municipal authorities; and should then report to the State Department of Labor and Industry both the conditions noted, and the fact that these conditions were reported to the municipality.

A somewhat similar agreement was made with the State Board of Education concerning the schoolhouses of the State, outside of first and second class cities. In school buildings upon which the law requires the placing of fire escapes, the Department of Labor and Industry shares with the Department of Public Instruction the responsibility for the correction of conditions tending to fire risk. That joint jurisdiction has been formally recognized by the Department of Education, and the further agreement has been made that all plans for new or improved school buildings, concerning which the Department of Labor and Industry has any fire risks responsibility, shall be submitted to both Departments for approval before adoption. As a still further extension of departmental co-operation, it was arranged that Department of Labor and Industry inspectors who, in the course of their fire risk inspection in schoolhouses under their care, find also poor sanitary conditions, shall file the report of such conditions in their own Inspection Bureau; and that the head of that Bureau shall transmit such reports to the head of the Department of Public Instruction for action within that Department. As a step toward defined responsibility and Departmental co-operation in general, the agreement is worthy of special attention.

Co-operative Work With Bryn Mawr Alumnae.

Another important field of co-operation is that between the Committee on Fire Prevention working under the direction of the Department of Labor and Industry, and the Bryn Mawr College Alumnae working on the same subject. The Bryn Mawr College work is in the nature of social service research with practical application on this great branch of welfare need. Its field work is organized under Miss Cochran and Miss Sanville, and very important results have already been attained. The Department of Labor and Industry has welcomed this co-operation with gratitude, and has extended its own help to the Bryn Mawr Committee wherever possible.

Phases of fire precaution upon which the Board ruled specially during the year concerned the elements of fire risk that may be con-

tributed by the occupants of a building, even when the building itself is properly guarded. It was ruled to forbid smoking in workshops and factories where readily combustible material is handled or stored; to forbid the carrying of matches and smoking utensils into cereal mills because of the explosive nature of cereal dust; and to forbid the carrying of matches and smoking utensils into powder mills and into all places where explosives are manufactured, handled or stored.

The necessity of this last provision is so primitively self-evident that the rule would seem to be a work of supererogation. A wail from the manufacturers of explosives, however, called upon the Board for aid in this, confessing that neither their authority, nor the instinct of self-preservation among their employes had been sufficient to eliminate this source of danger. It was felt that the mandate of the State, in the interest of common safety, backed up by the penalties for disregard of the State, might accomplish what had been an impossibility when it was only a matter of infringement of an employer's rule, and the loss of a position.

Along with the recognition given in this way for responsibility as shared by the occupants of, and workers in, a building in maintaining proper safety conditions, may be classed the rulings of the Board on the use of safety devices. Continuous reports that properly installed guards to machinery were frequently set aside by workmen, and that it was common to meet refusal to use the protection offered to the worker by goggles, masks, respirators, etc., brought about the rulings that guards for machinery must not be removed or made ineffective, and that guards provided for the person must be used. To help to standardize such provisions, and the work of the Inspection Bureau in enforcing them, the Board created a special committee of experts on safety devices to which contrivances of that nature may be submitted for official approval by the Department.

Concerning all codes and rules adopted by the Board it is the policy to give them the widest publicity possible by publishing them in trade and technical magazines. The co-operation of the State Bar Association has been asked that the rulings may be made familiar to the legal profession.

Allied with the work on safety standards, and growing out of that side of it which refers to the individual worker, is the Board's interest in the development of safety committees in industrial plants. The State Federation of Labor is pledged to give its help in this; and all such safety committees are to be considered advisory to the Safety Standards Committee of the Industrial Board. Wherever possible also such work is to be carried on in close harmony with the National Red Cross Society, thereby giving an even broader outlook and significance.

Hearings on Women and Children in Industry.

The other group of hearings, that concern the effect of laws and regulations already in operation, centred entirely around the presence of children and women in the industries of the State, and represented the more or less organized objection on the part of employers to the Child Labor Act of 1909, and the Woman's Act of 1913. Questions presented during the period under review concerning the Child Labor Act proceeded almost entirely from the tobacco industry, and were occasioned by the provision that children over fourteen, who could read and write the English language intelligently, and who were physically qualified, might be employed in establishments for the manufacture or stripping of tobacco or cigars, where it was proved that the danger or menace to the health or safety of minors had been removed, or that employment in some part or parts of said industry was not dangerous or a menace to the health or safety of minors employed therein. Without exception the tobacco manufacturers who appeared at these hearings declared themselves unwilling to do anything that would interfere with the welfare of the children of the Commonwealth; but they contended that the case against the healthfulness of the tobacco industry was not proved. A series of hearings on the subject evoked much interest in the trade, and among the welfare workers of the State; but was, on the whole, inconclusive in results. The enactment in 1915 of a new Child Labor Law, mandatory against the employment of children under sixteen in the tobacco industry, brought this series of hearings to a close.

It is of interest to chronicle that at a later date the Board was instrumental in having clinical work begun in connection with the medical department of the University of Pennsylvania for the study of this subject. Pending an authoritative decision in this way, the Board granted the manufacturers' petition that minors may be temporarily employed in the packing and banding of cigars, on condition that they are allowed in no other departments of the tobacco factories. The tobacco manufacturers manifested one other special phase of interest in the employment of children.

Under the act of 1909, some certificates had been granted for the employment of minors under sixteen in certain departments of tobacco or cigar factories. It was asked whether or not such certificates which had not expired by reason of the increased age of the children would continue in force after the new Child Labor Law should become operative, January 1st, 1916. With the approval of the Attorney General, it was ruled, on behalf of the manufacturers, that such certificates, having been asked for and granted legally and in good faith, should be allowed to stand; but that, in anticipation of the operation of the new law, no new ones should be granted.

January 1st, 1916, when the new Child Labor Law became operative, marked a distinct era in the Board's activities on this subject. The new law, while forbidding the employment of children upon dangerous machinery, leaves a margin for the Board's determination of what shall be classed as dangerous machinery. As a basis for such decisions, the Board adopted the principle that possible danger must be considered as twofold, to the minor himself, and to others who also might suffer from his lack of maturity either in strength or in judgment. On these foundations, for instance, it was ruled that minors under eighteen shall not be employed in running elevators, in acetylene welding, in certain types of electrical work, etc. A curious instance of the unexpected application of law came up in the question whether or not this provision concerning dangerous machinery should apply to machinery in use in manual training and technical schools. The Board ruled that minors working on machinery under direction of instructors in such schools were outside of the intent of the law.

Health Standards Established for Child Workers.

Undoubtedly the most important action of the Board on the subject of child labor, as brought up apropos of the new law, was the adoption of health standards where employment is conditioned upon physical fitness. Here the Board received the expert aid of medical men of high standing.

The new Child Labor Law differs from former legislation on that subject in Pennsylvania in that it puts the issue squarely on the basis of an educational measure. Viewed as such, it may be worth while to point out that it leaves a place for leakage that, with the best will in the world, is beyond the power of the Department of Labor and Industry to help to control. As the law now stands, employment certificates are granted by the school authorities to such minors only as enter the industrial field. For those who drop out after a certain point upon allegation of need at home, and who, on that basis, enter domestic or agricultural service, either in their own homes, or with others, there is no required means of keeping record. Some certificated form of dismissal for those children, as for those who enter the industries, would doubtless tend to increase the efficiency of the law as an educational measure.

The tobacco industry objected not only to the Child Labor Law, but to the so-called Woman's Law of 1913. This objection was based on the limitation of working hours which the bill entails. The complainant employers in this industry felt that their factories had opened up a new wage-earning occupation for women in regions where

previously employment other than domestic service had been unknown; and that, in recognition of this economic service, they should not be restricted as to the number of hours required from the female workers. Here again they protested that they desired only the good of their employes, but maintained that that good would not be lessened by a schedule of over fifty-four hours per week. In support of their contention that they desired the good of their employes, they cited the fact that the wages paid in their factories raised the scale of wages paid in domestic service in the vicinity; and that therefore they had bettered the economic situation for women in those regions in two ways.

Objections to Woman's Law Heard.

The other factory occupation in which employers' objections to the Woman's Law came formally before the Industrial Board in two instances was that of the knitting mills. In one case this objection was to the requirements concerning sanitary conveniences for the women employed; and in the other it was again on the score of the limitation of hours.

In the latter instance the complainant employer expressed his belief that the knitting mills of Pennsylvania might be obliged to move to states "where you could work your women as many hours as you pleased." In these cases the Board ruled that the action requested was beyond jurisdiction.

A series of hearings on the operation of the Woman's Law was granted the telephone business upon request of the so-called independent telephone companies. The main question was that of daily hours of women's service, though, as a subsidiary point, the desire to vary the recurrence of the weekly rest day figured also. It was claimed that the law which prescribed a limited working-day worked a hardship and injustice in the small rural telephone exchanges; and, because it would compel many of them to close, would also work a hardship upon the general public. It was held that the business of these exchanges and companies was so small that in many instances the income would not cover the expense of the three salaries required if the legal hours were to be observed; and also that in many places it was absolutely impossible to secure the third operator. The remedy proposed was, in these small exchanges, to cease to count as working hours, and denominate as "sleeping hours" the time between 11:30 P. M. and 5:30 A. M.

The operator would be required to be present during that time, but would be allowed to go to bed to secure such sleep as was possible. Comfortable sleeping quarters were to be provided, and the telephone

companies offered the agreement that when, under actual work count, calls ran over six per night in a month, they would furnish a regular night operator, and abandon the plan of the so-called "sleeping hours."

The Board was quite aware of the practical business difficulties facing the telephone companies in this matter; but it was also face to face with the fact that the law in the case was enacted for the benefit of the women. The proposed arrangement of "sleeping hours" would have made it possible that the presence of young women on the premises in telephone offices might be required for ninety (90), hours per week. The telephone companies argued that no other modification could meet their need; and the Board decided that it must learn at first hand the opinion of the women whose time was the commodity which was being adjudged to have no market value. Inquiry was made concerning service in telephone companies large and small. The conclusion finally reached was that the change asked for in the application of the law was not of general necessity to the telephone business; and that, so far as could be ascertained the proposed change would be to the detriment of the women whom the law was designed to benefit.

On the point of the variation in the recurrence of the weekly rest day it was ruled, on behalf of the companies, that the intent of the law was met by one day of rest in each calendar week as well as by the strict construction of every seventh day. Testimony agreed that smoothness of service and satisfaction of employes were both secured by this method.

One very small hearing before the Board was of special interest as illustrating the other side of legislation intended for the benefit of women. It was granted to two women telegraphers engaged in railroad train service. They protested that the law limiting their work to six days per week reduced their earning capacity, and curtailed their chance to compete with men in their employment.

In as much as the law is mandatory on the point in question the Board had no power to modify.

Consideration of Women Employed in Hotels.

The chief interest of the year concerning the Woman's Law came from the employers in hotels and institutions; and the series of hearings granted to them was largely attended, and prolific in discussion.

The protest here was chiefly against the requirement of the law that one full day of twenty-four hours be given for rest in each week. The legislature of 1915 conferred upon the Industrial Board the power to modify the law in this particular, and for this kind of employment, by dividing the day of rest when, in the judgment of the

Board, that seemed advisable. The point of the hearings was the endeavor to prove to the Board that this was advisable. Hotel men, singly and in organization, the heads and representatives of educational and philanthropic institutions, came in great numbers with statements of inconvenience, disorganized service, increased expense,—all to be laid to the account of the entire day off of each woman as required by the law. In addition to these inconveniences to themselves, the complainants charged that the women did not like the whole day off because of its arbitrary character; that they lost “tips” by it, and therefore objected to it; that they did not enjoy it because the time hung heavily on their hands, and, worst of all, that the whole day off was a source of moral danger to the women because they did not know how to use it properly, and therefore fell into serious temptations and character-wrecking occupations. Social workers present at these hearings concurred in some of these objections, even though they themselves had helped to secure the passage of the law.

One thing was noticeable in the discussions at the hearings—the fact that the women involved were not present to speak their own mind. That they were not there was not due to the lack of a public invitation nor to lack of a spirit of welcome, but to hard economic facts. They were busy at the occupations under discussion; and they were afraid of imperilling their “jobs” by telling publicly what they thought of working seven days in a week, or of what a divided rest day would mean to them. Sensing this situation the Board undertook a private investigation of the subject, and for several months carried on an individual inquiry which included personal interviews with women employed in hotels and institutions throughout the State. Most interesting results were obtained. In many cases where employers complained of the heavy expense entailed by the law because of the extra help demanded to permit the day off, the employes testified that no extra help whatever had been employed, but that they had been required to do extra service that each might have her day off. It was interesting that concerning this there was no complaint. In other cases where employers had described employes as “fighting” the law, those employes told of the eagerness with which they looked forward to the day of rest. One instance was found where an employer had told his employes that “some people” were trying to take their rest day from them and that he was going to the hearing “to see about it.” They believed him their champion for the retention of the day off when in reality he was emphatic in his demand to be relieved of it. Another instance was discovered where the employer had told his employes that the suffragists were trying to rob the working women of their holiday; and the comment was, “Now what would you think of that—that those women would try to keep us from having a day to

ourselves!" In places where tips were most plentiful and most likely to work against the desire for a day off, the surprising thing was that the women frankly said, "We need the time to ourselves even more than we need the money." Along this line too was the frequency of the testimony that the day off was an economy in that it gave time for sewing and repairs to the wardrobe. The hearings demonstrated two things—that the real objection of the employers was to time off rather than to the undivided day; and also that the women favoring the whole day as against two half days were in the majority, though all were not agreed on this. Two lines of cleavage appeared among the women. The older, and presumably more "settled" women favored the whole day off; and the women in the smaller hotels and institutions, sympathizing with the problems of their employers, were more frequently those who expressed a willingness to accept two half days. The Board decided to test the matter still further, and to establish experiment stations in different parts of the State to try out modifications of the day of rest, in the endeavor to reach a conclusion that should be fair to both employer and employe. Representative types of hotels and institutions were selected where the divided rest day was put into operation, the experiment to run three months under the observation of the Department. The problem before the Board was to secure for the employers the smallest amount of inconvenience compatible with insuring to the employed women the benefits intended by the law; and the endeavor to meet this through the knowledge gained in the experiments, governed the formation of the rules and modifications on this subject which were issued in the spring of 1916.

Two outstanding facts emerged in the investigation connected with both the telephone and the hotel and institution service. One was that each employer felt that it was very well to have legal regulation for some other classes of employment, but that his own class, for certain cogent reasons, should be exempt. The other was that the great majority of the women interviewed expressed deep appreciation of the law limiting hours and providing a day of rest.

Board Promotes Early Christmas Shopping.

For years it has been recognized that one of the severest trials to employed women arises from the rush season preceding Christmas. The difficulties of this period are not confined to the mercantile trade, but extend into many lines of manufacture needed to supply that trade, and thus develop a distinctly seasonal problem in industry that is very far-reaching. The Board did its part in 1915 to help in the early Christmas shopping campaign which has been carried on for several years by helpful social agencies. Appeals were made to the

public by the Commissioner of Labor and Industry; and correspondence was carried on with all the leading mercantile establishments in the State, soliciting their increased interest in this matter, and also inquiring concerning their methods for systematizing the extra work of the stock taking period which usually follows immediately after Christmas. In the past, the stock taking, with the following special sales have constituted almost as much of an industrial problem for the women in this employment as has the Christmas shopping itself. The Board's inquiry revealed the fact that in the larger and more up-to-date establishments, stock taking has been so systematized that it is no longer the terror that it was a few years ago and that it is only in the less progressive firms that it carries its old-time burdensome aspect.

Seasonal work of other kinds, with its attendant difficulties, has been before the Board, and in practically all instances as phases of the administration of the Woman's Law. One of the incidental effects of that law, as revealed in this way, seems to be an impetus to scientific management in the attempt to eliminate wherever possible the seasonal conditions in industry.

So many allegations were made that the Woman's Law was tending to eliminate women from industry because employers would not be bothered with the restrictions laid upon them in handling female labor that the Board turned to the Inspection Bureau for its opinion on the point. The Bureau, it is to be remembered, is in continuous touch with the labor situation throughout the State. The testimony of the Bureau was that, while the law had caused readjustments in the female labor market, and had thereby worked hardship in individual cases, nevertheless its effect in general had been decidedly beneficial, and that it had not decreased the amount of employment open to women.

Study of Communities Offering Employment to Women.

The whole subject of women in industry is of keen importance in a state like Pennsylvania, where the female population is 51 per cent of the whole, and where the drift of occupations for women is distinctly toward the industries with which the state abounds. Up to the present, industrial thought and calculation have been carried on largely in sale terms, even though, in Pennsylvania, women already constitute one-fifth of the industrial workers. It has seemed fitting to the Industrial Board that some inquiry should be made into the industrial opportunities open to women in this State. Such an inquiry should be helpful, not only to women as such, but to com-

munities planning to bring in new industries to serve their people. A modest beginning in such inquiry was made by the Board during the period covered by this report. Five of the smaller industrial communities of the State, each distinctly representative in some line, were selected for an initial study concerning employment open to women. With this as a basis, the Board hopes to enlarge the study as time goes on; and to this end it solicits the interest and co-operation of municipalities and chambers of commerce that are planning community studies or reviews.

During recent years an increasing recognition of unemployment as a social evil has been a mark of the public conscience. That this unemployment has resulted largely from lack of organization of the labor market is a growing conviction of students of economics. Some industries are overloaded with workers, while others limp along for lack of them. One proposed remedy is that the State shall perform the service of organizing the labor market through public employment offices or labor exchanges. The Industrial Board was a unit in approving legislation passed on this subject in 1915, and directed its work wherever possible to assist in working out the new system of labor exchanges thus made possible in Pennsylvania.

Through conference with the Commissioner of Immigration of the Federal Department of Labor, a system of co-operation with the Federal Public Employment Offices has been instituted that promises to be of great service in co-ordinating employment work in this section of the country—a work that may be much needed at the close of the European war.

Will Investigate Labor Difficulties.

Undoubtedly the most thrilling interest before the Department of Labor and Industry in recent months has been that of strikes and labor troubles. These too have found their way into the deliberations of the Industrial Board. The Board kept in close touch with the big strike of May, 1916, in the Turtle Creek Valley in the western end of the State, and with the events growing out of it. As a consequence the decision was made that in any case hereafter where the militia is called upon to keep the peace during labor difficulties, the Board shall at once follow to inquire publicly into the conditions that have made such a request necessary.

Although a composite creation whose aim must be to be impersonal in its work, the Industrial Board has a distinctly personal side; and that personal side suffered a real grief in 1915 in the death of one of the original members, Mr. George S. Comstock, of Mechanicsburg. A quiet, courteous gentleman, devoted to the work of the Board, and

efficient in its service, his death was a loss to the State, as well as to the personality of the Board. His successor, Mr. Otto T. Mallery, of Philadelphia, was appointed during the summer of 1915.

The expiration of the term of Col. John P. Wood, of Philadelphia, and the resignation of Mr. James C. Cronin, of Philadelphia, both original members of the Board, have still further changed its make-up during recent months. Mr. Cronin has been succeeded by Mr. William Young, also of Philadelphia.

This record of the Board's interests and activities during this period is by no means complete. Only those outstanding features which have required the most time have been touched upon. Scarcely an economic problem known to the present day has been unrepresented in its interests. Keenly aware of this during all its service, whether its trust as conscience and as pathfinder has or has not been well kept, the Board feels only the future can show.

WORK OF APPROVALS COMMITTEE, PASSING ON SAFETY DEVICES, BECOMES IMPORTANT ACTIVITY OF INDUSTRIAL BOARD.

The work of the Approvals Committee is becoming an important feature of the activities of the Industrial Board. This Committee was created by the Board to examine safety devices for the protection of life and property and to recommend all proper devices for approval of the Board. When a device has been approved a "Certificate of Approval" is issued, which is awarded to the person or firm submitting the device. The following is a copy of this Certificate:

No.

Date.

Certificate of Approval.

This is to certify that the Industrial Board of Pennsylvania Department of Labor and Industry has examined and approved

The
of the

.....Secretary.

The value of this stamp of approval is recognized by manufacturers of safety devices, not only in this State but in other States as well.

At each meeting of the Committee the number of devices presented is larger than at the preceding meeting.

The importance of bringing these approved devices before the public is recognized by the Industrial Board, which is creating a Museum of Safety Devices, where each approved article may be exhibited. In order to have a device placed in this Museum the manufacturer must furnish the following:

1. The device or a working model.
2. Two unmounted photographs of the device, 8" x 10".
3. A copy of the approval of a testing laboratory of recognized standing or similar institution.

The advantage to the public of such a Museum cannot be measured. Most of our manufacturers are willing to furnish proper safeguards, but do not know which is the best. This Museum containing samples and complete records of approved devices will enable persons, by observation or inquiry, to determine which device would be the best for them, and in doing so will make it easy for them to keep within the law.

EVERY RELATION BETWEEN EMPLOYER AND EMPLOYEE TO BE CONSIDERED AT THE FOURTH ANNUAL WEL- FARE AND EFFICIENCY CONFERENCE.

Elaborate plans are being perfected to make the Fourth Annual Welfare and Efficiency Conference, to be held in the Capitol at Harrisburg, this fall, one of the greatest symposiums ever held in this State dealing with the relation of employer and employe and the effect of state legislation on that relation.

This conference, to be held under the auspices of the Department of Labor and Industry with the co-operation of the Engineers' Society of Pennsylvania, will attract to Harrisburg officials of industrial establishments, large and small, throughout the State, leaders of labor and individual employes, sociological workers, attorneys, physicians and safety engineers.

Under the direction of Commissioner John Price Jackson, a program is being prepared for the three days' sessions of the conference, Tuesday, Wednesday and Thursday, November 21, 22 and 23.

National and State officials will participate with the representatives of labor and industry in the discussions centering about recently enacted legislation and measures proposed for legislative action, bearing on conditions of labor. The entire first day of the conference will virtually be given over to discussions of the Workmen's Compensation Act. Every phase of this new measure, vitally affecting every worker and employer in Pennsylvania, will be analyzed and the operation adopted by the State for enforcing the law will be explained. The opinions of manufacturers, labor organizations and physicians on the Compensation Act will be given.

Every State law affecting employer and employe will be discussed. Among these themes will be, accident prevention, first aid methods, occupational diseases, problems of employment and unemployment, avoidance and settlement of labor disputes, Americanization of alien workers and fire prevention in the factory and public hall.

Members of the Workmen's Compensation Board and the ten compensation referees will attend the sessions as will also the members of the Industrial Board, the staff of the Department of Labor and Industry, including the inspectors from the Bureau of Inspection, the physicians and engineers of the Division of Industrial Hygiene and Engineering, members of the Bureau of Mediation and Arbitration, the officials and statisticians of the Bureau of Statistics and Information and the staff of the Bureau of Employment.

It is planned to pattern this year's meeting after those which were held during the first two years of the Department's organization in order that practical subjects relating to Safety, Welfare and Efficiency in Industrial Establishments and Organizations can be presented. It has also been decided to try to have presented practical plans which have been tried out in the industries to further safety and allied projects and to invite open discussions on the topics presented.

In order that some suggestions might be obtained from various people throughout the State, Commissioner Jackson recently sent out the following letter to some of the individuals or companies who took active interest and participated in previous conferences.

It has been definitely decided by this Department to hold the Fourth Annual Conference on Welfare and Efficiency sometime during the latter part of November. Believing that you have been interested in these Conferences I should be very glad, indeed, to have you give me any suggestions you may wish concerning the topics to be taken up at these meetings.

It has been definitely decided that the Conference this year will follow along the lines of those held previous

to last year, inasmuch as the sessions can then be devoted exclusively to the consideration of subjects intimately connected with the industrial life of this State.

It is the desire of the Department that each meeting of this coming conference shall be extremely interesting and profitable to all who care to attend and accordingly any suggestions you may care to give will be very much appreciated and given careful consideration.

I shall be pleased to have an early reply as it is absolutely necessary to begin making arrangements immediately in order to secure the speakers.

The response was very gratifying and the suggestions given were excellent. As far as time permits they will be considered.

Another new feature this year will be the lantern slides which will be thrown on the screen showing what has been done in Pennsylvania along safety lines in the last few years. In order to obtain these slides, the following letter has been sent out. It explains itself and is addressed generally to the heads of all industrial establishments or organizations in the State.

A liberal response to this request will surely be a means of adding great interest to the other features of the coming Conference.

As you may be aware this Department will hold the Fourth Annual Welfare and Efficiency Conference in Harrisburg on November 21, 22 and 23.

As one of the special features of this Conference this year, we wish to show what Pennsylvania manufacturers have done in the effort to improve the health and safety of their employes.

I should feel highly pleased if you will help in this effort by sending me some photographs of any safeguards or other apparatus which you have installed for this purpose, and which you think would prove instructive or offer suggestions to other persons who are interested in similar conditions.

It is my intention to place these pictures in our exhibit, giving due credit to the company furnishing the same, and in addition have lantern slides made of all the representative types and to project these slides at various times throughout the conference meeting.

These pictures might include exhaust systems for removal of dusts and fumes, machines safeguarded—it would be preferable if another picture could accompany these, showing condition before safeguards were installed—wash and dressing rooms, first aid rooms or dispensaries, apparatus or methods for fighting or preventing fires and to render easy escape in case of fire, etc.

It would be preferable if pictures would be companion ones, showing conditions before and after. Pictures should be unmounted and not any smaller than 5 x 7 inches.

If you can assist me in this way I will ask you to send the prints to our Chemical Engineer, John S. Spicer, Kunkel Building, Harrisburg, whom I have asked to take charge of this phase of the Conference. They should be in his hands not later than October 1st, but any earlier date would be more desirable.

Trusting to have your help in this way, and also reminding you to bear in mind the importance of having your company represented at the Conference by one or more representatives, I beg to remain,

Faithfully yours,

(Signed) JOHN PRICE JACKSON,
Commissioner.

WORKMEN'S COMPENSATION AS A SCIENTIFIC DISTRIBUTION OF COST OF INDUSTRIAL ACCIDENTS.

By COMMISSIONER JOHN PRICE JACKSON.

The Compensation System of the State of Pennsylvania undoubtedly and clearly is proving its worth both by tending towards the reduction of unnecessary accidents and in bringing to the injured man or the dependents of the workman, who has been killed, prompt aid in the time of need. This is as true in the coal mine industry as it is in the other industries of the State.

Since the installation of the Compensation System, there have been inaugurated new methods of accident prevention and an advanced activity in the promotion of earlier devised methods for safeguarding the worker throughout the great portions of our coal fields. These safety activities have undoubtedly already been the means of saving many lives and limbs. As time passes and their effect becomes more fully felt, this saving will be very evident. Some score of years ago, when high speed coal mining machinery, electricity and compressed air, were introduced, deaths from accidents in mines each year increased, in this country, to nearly four per thousand miners employed. This has been gradually reduced to some extent, through safety study and methods.

The efforts for safety have, during the past year, been redoubled.

The reason there seem to be more accidents in the coal fields at present than heretofore is because, under the Compensation System,

all accidents of two days or more duration must be reported. Heretofore only deaths or very serious accidents were reported.

These amounted to but a small proportion of the total number of accidents such as are now reported. I can readily appreciate that a person who was informed of the number of accidents as reported heretofore might be astounded by the larger number reported under the present conditions. If, however, such a person took the pains to analyze the character of those accidents, he would find that the greater bulk of them were of the class not heretofore reported.

The Compensation System, in the coal regions and elsewhere undoubtedly is now, and is destined, to a very great degree, to save expense to the people of the Commonwealth of Pennsylvania by eliminating tens of thousands of costly accidents. This does not mean that the Compensation System will reduce the present cost of a pair of shoes or reduce the present cost of a ton of coal.

This system is a scientific distribution of the cost of accidents among employers, eliminating the waste and unequable distribution of compensation, which existed under the previous methods.

Presumably all accidents were compensated before the new system went into effect through the medium of the common law and the courts. If, however, the cost to the employer was not then as great as it is now, it was because the injured man or widow or orphans were unable, by reason of the difficulties imposed and the inhumanities of the system, to obtain reasonable aid in their time of distress, suffering and need.

Frequently they got such aid at the expense of the people through the poor directors or charitable organizations. In other words, under the old, antiquated, common law, suitable for a century ago, the injured and the dependents were supported but their support was often in the nature of charity from the community. The cost had to be paid just the same.

The present system makes a reasonable and workable scientific arrangement, whereby the enormous losses of the past in legal and court expenses and in the occurrence of many unnecessary accidents, are reduced or eliminated.

The big advantage to the people, from the purely commercial standpoint, is that the Compensation System not only thus systematically pays such compensation, but also makes it financially desirable for every employer and every employe to adopt and install the very best and most satisfactory methods of accident prevention.

Our experience with the compensation system indicates without peradventure of doubt that the reduction of industrial accidents causing injuries and deaths will save to the people of this Commonwealth far greater expense than its cost.

This is true from the purely financial standpoint and without considering the far greater benefit in the reduction of suffering and hardship.

BUREAU OF INSPECTION ACTIVE ON GENERAL AND SPECIAL INSPECTION WORK.

A new code system, by which inspectors in the field make their reports to the Bureau in Harrisburg, became effective August first and is being used with satisfaction to both the inspectors and the officials of the Department. When this system was first inaugurated for use in the field the inspectors met the conditions very satisfactorily and the result has been a marked degree of efficiency.

Over 50,000 inspections and visits have been made by the inspectors since January first. It is the desire of the Department to have as many complete inspections made of the various industries of the State as possible in one year. If the full time of the inspector could be given directly to inspection there would be numerically more inspections made, but under the laws, inspectors must aid in other work of the Department covering compensation, insurance, mediation and arbitration and allied activities.

The vacation periods of the inspectors, during July and August have caused a slight falling off of the total number of inspections for these two months. It is interesting to know, however, that a great volume of work was actually accomplished in the month of August although forty-one inspectors were off duty for an aggregate total of eight-two weeks. During the month of August in spite of vacation periods, the inspectors made 6,479 inspections. It is probably safe to say that if all inspectors had been on duty for the entire month, the Bureau of Inspection could report over 8,500 inspections and visits.

Never in the history of the Department has there been better co-operation with employers and employes in the matter of safeguarding machinery. With but few exceptions the instructions issued by the inspectors for safeguarding machinery and structures are being rapidly fulfilled.

Work of Division of Building Inspection in July.

From statements made by a large number of architects and contractors it is shown that the efforts of the Bureau of Inspection of the Department of Labor and Industry have convinced a great portion of the public that it is a distinct advantage to comply with the requirements of the Act of Legislature, to submit, to this Department, plans and specifications of certain types of buildings before erection.

Many architects, with splendid ideas of construction and beauty of design, have at times overlooked safety features and, upon rejection of their plans, have visited the Harrisburg office and, having had the necessary treatment of the plans explained to them, have gone away well satisfied that safeguarding the public is the first thought of the Department engineers in charge of this work.

In apartment houses the matter of means of egress appears to be the stumbling block to a great many architects. The necessity for two separate means of egress from each apartment is often overlooked in the endeavor to arrange for private halls for each apartment. A common hall extending throughout the entire length of the building and leading to stairways at the front and rear is conceded to be the logical solution where there is more than one apartment on a floor. In remodeling old houses and arranging them for apartment houses, it is often difficult to obtain the common hall effect. This can be overcome by proper arrangements of the rooms forming each apartment, so that the occupants can, by means of properly arranged communicating doors, reach either exit from the building.

Success in business is accomplished not only by the most attractive display of goods, but by the ability to convince the buyer of the necessity for purchasing. If the inspector can thoroughly demonstrate to the owner and builder the vital need for safe exits and safety appliances, he reaps the best results from his labors.

During the month of July, seventy-nine sets of new plans and sixteen sets of revised plans, or a total of ninety-five sets of plans were received in the Building Division. The number of plans on which the approval of the Department was placed amounted to seventy-six. Plans not approved have either been rejected or held in abeyance until more detailed reports are received from the local field inspectors. Rough sketches have been submitted by a number of firms. These sketches usually propose alterations and additions to old as well as new buildings, and as a rule are very unsatisfactory. They are usually returned to the owner with necessary instructions for correcting them.

Plans Approved by Bureau of Inspection During the Month of July.
Fire Escapes.

Town.	Building.	Contractor or Architect.	Owner.
Freeburg	Store.	W. L. Kieffer, & Son,	J. A. Ratdorf.
Reading,	Apartments.	Geo. W. Anne & Son,	P. M. Krick.
Columbia,	Factory.	Taylor & Dean.	Triumph M. Co.
Braddock,	Apartments.	Noe-Wadlow Co.,	Commonwealth Invest. Co.
Berwick,	Hall.	W. F. Remppis Co.,	I. O. O. F.
Schuylkill Haven.	Apartments.	Smith Peare & Iron Wks.,	Bast & Sons.
Harrisburg,	Apartments.	W. W. Lindsay Co.,	Jacob Miley Estate.
Marcus Hook,	Coating Bldg.	W. W. Lindsay Co.,	Congoleum Co.
Marcus Hook,	Warehouse building,	W. F. Remppis Co.,	H. P. Roeper.
Reading,	Apartments.	Star Ornamental Iron Wks.,	S. P. Haller & Co.
Colon,	Hotel.	Cameron Engineering Co.,	Conway & Blair.
Delaware Water Gap,	Hotel.	Potts Mfg. Co.,	Sarah A. Todd Estate.
Carlisle,	Home.	Potts Mfg. Co.,	Todd Memorial Home.
Harrisburg,	Morecantile.	Potts Mfg. Co.,	Geo. B. Etter, Art.
Uniontown,	School.	Taylor & Dean.	N. Union Twp. School Bd.
Towanda,	Apartments.	Letts & Austin,	Mrs. George A. Dayton.
Washington,	School.	Taylor & Dean.	Washington Bd. of Pub. Edu.
Duquesne,	Hotel.	Taylor & Dean,	Mrs. A. K. McKee.
Duquesne,	Apartments.	Taylor & Dean,	Mrs. G. E. Kunze.
Schuylkill Haven,	Infirmary.	Wm. F. Remppis Company,	Schuylkill Co.
Reading,	School.	A. R. Douglass,	Upper St. Clair Twp. School Bd.
York,	Lodge Hall.	Ed. Leher	York Lodge 265 F. & A. M.
Grove City,	Hotel.	Ellwood City Iron & Wire Wks.,	Behlender & Winsberg.
Grove City,	Apartments.	Ellwood City Iron & Wire Wks.,	Convent & Johnston.
Natrona,	School.	Taylor & Dean,	St. Ladislaus R. C. School.
Wilkes-Barre,	Mill.	Geo. W. Anne & Son.	Leon Ferembach Silk Mills Co.
Lewistown,	Man's Building.	Geo. W. Anne & Son.	Lucknell University.
Allenstown,	Factory.	Geo. W. Anne & Son.	Lucknell University.
Ashland,	Hotel.	W. F. Remppis Co.,	Bayuk Bros.
Mt. Carmel,	Store and apartments.	Zimmerman.	Christian Schmidt.
Shenandoah,	Lodge Hall.	W. F. Remppis Co.,	H. A. Wild.
Easton,	Store.	Leoforco Valencia Iron Wks.,	L. J. Wilkinson.
S. Bethlehem,	School.	Taylor & Dean.	American Flag Co.
S. Bethlehem,	Factory.	Geo. W. Anne & Son.	Holy Infancy School.
Brackebridge,	Hotel.	Taylor & Dean,	Mt. Lebanon School Board.
Swissvale,	Apartments.	Keystone Ornamental Iron Wks.,	Wm. Linker & Co.
Duquesne,	Apartments.	A. B. Rote & Co.,	Mrs. A. Keppler.
Lancaster,	Lodge Hall.		C. H. Grote.
			Angelo Cetaldi.
			P. O. S. of A.

Plans Approved by Bureau of Inspection During the Month of July—Continued.
Theatres.

Town.	Building.	Architect or Contractor.	Owner.
West Park.	M. P. T.	T. H. Piatt,	W. L. Keller & B. B. Antrip.
Newmanstown.	M. P. T.	C. J. Young,	Newmanstown Town Hall.
Dickson City.	M. P. T.	McFarland & Stone,	Geo. Morgan.
Burgestown.	M. P. T.	.....	Dominick Zatelli.
Belleville.	M. P. T.	.....	John Leister.
Derry.	M. P. T.	E. W. Eekert,	Geo. B. Meyers & Son.
Conshohocken.	M. P. T.	.....	Rose Vizoli.
Conway.	M. P. T.	.....	M. Stein.
W. Chester.	M. P. T. and Hall.	American Seating Co.,	Brown Auto Supply Co.
Mt. Union.	M. P. T. and Apartments	J. Herbert Hall	J. S. Shapiro.
Towanda.	Theatre.	.....	H. Elsbce, Agt.
Pittston.	Theatre.	H. C. Rutherford,	Dreamland Theatre.
McKees Rocks.	M. P. T.	H. G. Wardale,	Mrs. C. C. Emmel.
Harrisburg.	M. P. T.	R. R. Markley,	Athens George.
Bridgeport.	M. P. T.		Wm. Winterbottom.

Wash Rooms and Toilets.

Allentown,	Foundry.	R. E. Oche,	Aldrich Pump Company.
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Buildings.

Reading,	Apartments,	H. G. Mohr,	Samuel Sherman.
Allentown,	Store and apartments,		M. O. Rueh.
Wilkes-Barre.	Loft Building.	Knapp & Bosworth,	S. M. Lewis.
Carlisle.	Store and apartments,	M. I. Kast,	Dr. J. M. Houston.
Bechtelsville.	Factory,	C. C. Freeman,	Bechtelsville Improvement Co.
Ardmore.	Factory,	Stearns & Castor,	Autocar Co.
Bloomshurg.	Apartments,	.....	C. C. Yetter.
Mt. Carmel.	Factory.	Geo. H. Kieffer,	Mt. Carmel Silk Mfg. Co.
Altoona.	Store and Lodge Hall,	Hersh and Hersh,	J. O. U. A. M.
Elizabethtown.	Factory,	J. H. Wickersham,	Klein Chocolate Company.
Carlisle.	Store and apartments,	R. R. Markley,	S. Kronenberg Sons.
Franklin.	Church,	S. D. Brady,	1st Presbyterian Church.
York.	Garage,	J. A. Dempwolf,	Anderson Motor Co.
Phillipsburg.	Bank.	Denison & Hiron,	Moshannon Natl. Bank.
S. Bethlehem.	Store and apartments,	A. W. Leh	John Stefko.

Bakeries.

Pottstown, ...	Bakeshop, .....	.....	J. Elmer Porter. Carl Geyer.
Philadelphia, ...	Bakeshop, .....	.....	

Blowers.

Easton, ...	Hoop, .....	.....	B. F. Sturtevant Co., ...	Treadwell Eng. Co.
Easton, ...	Exhaust System, .....	.....	.....	Treadwell Eng. Co.

Summary.

Fire escapes, ...	41
Theatres, ...	15
Buildings, ...	15
Wash and toilet rooms, ...	1
Bakeries, ...	2
Blowers, ...	2
Total, ...	76

Fire Escapes Ordered by Bureau of Inspection During the Month of July.

Town.	Location, Name and Address.
Burnham, ...	Y. M. C. A. Building, J. S. Koller, Gen. Sec.
Bloomsburg, ...	C. A. Kleim, (Apartment House.)
Tobyhanna, ...	J. L. Seip, Beechwood House, (Hotel.)
Tobyhanna, ...	Geo. S. Rhoads, Tobyhanna House, (Hotel.)
Connellsville, ...	L. E. Hankison, West Penn Power House.
Reading, ...	Avondale Hotel, 1700 Centre Avenue.
Reading, ...	Wm. H. Dietrich, 45 N. 3rd Street, (Apartment House.)
Reading, ...	Engle & Van Denburg, 220 N. 4th Street.
Lansdale, ...	J. N. Andrew, 526 N. Broad Street, (Shirt Mfg.)
Carlisle, ...	Lockman Bros. Silk Co., N. T. Lockman.
Bloomsburg, ...	Dr. J. S. John 227 W. Main Street, (Apartment House.)
Wilkes-Barre, ...	James Poland, South Main Street, (Lodging on third floor.)
Wilkes-Barre, ...	Joseph Lebonitz, 254 Penna. Avenue, (Junk Shop.)
Mt. Pocono, ...	The Ontwood Hotel Co., (Hotel.)
Canadensis, ...	The Pinehurst, (Hotel.)
Stroudsburg, ...	Highland Inn, (Summer Hotel.)
Stroudsburg, ...	The Pennlyn, (Summer Hotel.)
Stroudsburg, ...	Charleigh Inn Co., (Summer Hotel.)
E. Stroudsburg, ...	Maplehurst Inn, (Summer Hotel.)
Henryville, ...	Henryville Hotel, E. R. Henry.
Pocono Summit, ...	Mountain Summit House, Isaac Miller.
Pocono Pines, ...	Pocono Lake Hotel, J. E. Donny.
Pocono Pines, ...	Pocono Pines Inn, Wm. P. Kenney.
Pocono Lake, ...	The Antlers, Charles Gravie.
Pocono Lake, ...	Lake View House, Geo. Bayer.
Pocono Lake, ...	Laurel Inn Isaac Stauffer.
N. Water Gap, ...	The Willow Dell, C. B. Altemose.

Work of Division of Building Inspection in August.

The month of August was a busy one in the Building Division in the consideration of plans for new, and the remodeling of old motion picture theatres. Plans presented for new theatres, in a great many instances, failed to embody the necessary amount of exit space and aisle widths. Old theatres, as a rule, need various changes to bring them up to the requirements of the State laws. The treatment of plans in these theatres necessitates considerable study by the Department engineers in order to secure the best results.

A great many buildings converted, several years ago, into motion picture theatres, were not suited for the purpose and, in order to meet the present standards adopted by the Industrial Board, a complete revision and remodeling of the buildings, as well as material changes in surrounding conditions, are necessary.

A great number of plans were presented in person by architects and builders, and, in all cases, the plans were carefully gone over with them, changes suggested, and later on the plans were revised and returned to the Department and finally approved.

During the month of August, ninety-one sets of new plans and twenty-four sets of revised plans, a total of one hundred and fifteen sets, was received in the Building Division. The number of plans, on which the approval of the Department was placed, amounted to eighty. The remaining plans were either rejected or held in abeyance until more complete data could be secured.

Plans Approved by Bureau of Inspection During the Month of August.
Fire Escapes.

Town.	Building.	Architect or Contractor.	Owner.
Harrisburg, ...	Apartments, ...	Potts Mfg. Co., ...	B. F. Umberger,
E. Stroudsburg, ...	Factory, ...	Westbrook & Voss, ...	Capitol City Cap
Nazareth	Almshouse, ...	(A. G. Plenty, Eng., ...	Northampton Co.
Coropolis, ...	McKinley School, ...	(E. P. Richter, Contr., ...	Coropolis School Board.
Coropolis, ...	Central School, ...	Taylor & Dean, ...	Coropolis School Board.
Coropolis, ...	Lincoln School, ...	Taylor & Dean, ...	Coropolis School Board.
Greensburg, ...	Apartments, ...	Taylor & Dean, ...	Henry S. Welty.
Schencksville, ...	Factory, ...	Metz Structural Steel Co., ...	F. H. Beltz.
S. Bethlehem, ...	Tenements, ...	S. Beth. Orn. Iron Works, ...	Louis Castolucci.
Reading, ...	Restaurant and apartments, ...	W. F. Remppis Co., ...	Rooper Estate.
Reading, ...	Shop and apartments, ...	W. F. Remppis Co., ...	Rooper Estate.
Reading, ...	Store and apartments, ...	W. F. Remppis Co., ...	Rooper Estate.
Orwigsburg, ...	Mercantile building, ...	W. F. Remppis Co., ...	J. L. Zulick & Co.
State College, ...	Hotel, ...	W. F. Remppis Co., ...	J. H. Glassmayer.
Homestead, ...	Store and apartments, ...	Keystone Orn. Iron Co., ...	O. Magrine.
N. Braddock, ...	Store and apartments, ...	Keystone Orn. Iron Co., ...	Mrs. A. Brazzell.
Sturgeon, ...	School, ...	W. L. Kiefer, ...	S. Fayette Twp. School Board.
Reading, ...	Apartments, ...	Taylor & Dean, ...	H. D. Brenizer Estate.
South Heights, ...	School, ...	Portable Tool Co., ...	South Heights School Board.
Towanda, ...	Mercantile building, ...	J. A. Dempwolf, ...	Towanda Print. Co.
York, ...	Garage, ...	Smith Fence & Iron Co., ...	Anderson Motor Co.
Harrisburg, ...	Store and apartments, ...	Smith Fence & Iron Co., ...	E. M. Hershey.
Waynesboro, ...	Store and factory, ...	John Balzey Iron Wks., ...	Beek & Benedict Hardware Co.
Williamson School	Dormitories, ...	Earle W. Gray, ...	Williamson Free School.
Girard, ...	Hotel, .....	.....	Girard Hotel. Bank.
Emporium, ...	Store and apartments, ...	H. Bowward Bronze Co., ...	Cameron Co. Bank.
Bethlehem, ...	Office building, ...	Metz Struc. Steel Co., ...	Beth. Steel Co.
Stowe, ...	School, ...	Metz Struc. Steel Co., ...	W. Pottsgrove H. School.
S. Bethlehem, ...	Hotel, ...	Guerber Engineering Co., ...	T. C. Caffery.
Reading, ...	Hotel, ...	W. F. Remppis Co., ...	Continental Hotel.
Reading, ...	School, ...	Metz Struc. Steel Co., ...	Red Hill High School.
E. Beth. Twp., Wash. Co., ...	Lodge hall, ...	C. C. Compton, ...	E. Beth. Twp. School Board.
Reading, ...	Hotel, ...	W. F. Remppis Co., ...	B. P. O. E.
Nanticoke, ...	Apartments, .....	.....	Frank Kryzanski.
Reading, ...	Store and apartments, ...	W. F. Remppis Co., ...	Adam Haus.
Homestead, ...	Hotel, ...	Keystone Orn. Iron Co., ...	O. Magrine.
N. Water Gap, ...	Store and apartments, ...	Cameron Engineering Co., ...	Segnine & Altomos.
Clerfield, ...	Storage building, ...	Oshorn Machine Company, ...	Spalde & Stauffer.
Easton, ...	Apartments, ...	J. J. Weitzenfeld, ...	C. Servan.
Reading, ...	Store and apartments, ...	W. F. Remppis Co., ...	Mr. Snyder.

Plans Approved by Bureau of Inspection During the Month of August—Continued.
Fire Escapes.

Town.	Building.	Architect or Contractor.	Owner.
Grove City, ...	Store and apartments, ...	Elwood City Iron & Wire Wks., ...	Covert & Johnson.
Easton, ...	Mill, ...	Ed. Paul Richter, ...	Mr. Correll.
Harrisburg, ...	Apartments, ...	Smith Fence & Iron Co., ...	Jacob Miley Estate.
Wilkes-Barre, ...	School, ...	R. Ireland, ...	High School.
Wilkes-Barre, ...	School, ...	R. Ireland, ...	East End School.
Wilkes-Barre, ...	School, ...	R. Ireland, ...	S. Main Street School.
Wilkes-Barre, ...	School, ...	R. Ireland, ...	Courtright Avenue School.

Theatres.

Warren	M. P. T., ...	H. S. Bair, ...	F. H. Hamilton.
New Bethlehem, ...	Theatre, ...	A. W. Lech, ...	C. E. Andrews Lumber Co.
S. Bethlehem, ...	M. P. T., ...	W. H. Overdorf, ...	Pastime Theatre.
Dubois, ...	M. P. T., ...	J. H. Johnson, ...	Phelix Mikelonis.
Waterford, ...	M. P. T., ...	F. J. Shollar & Son, ...	Hovis Wilder & Schlosser.
Williamsburg, ...	M. P. T., ...	American Seating Co., ...	Wm. R. Doan.
Huntingdon, ...	M. P. T., ...	American Zinc & Chem. Co., ...	Gamble Theatre.
Langeloth, ...	M. P. T. and Hall, ...	J. Chas. Norton, ...	American Zinc & Chem. Co.
Ardmore, ...	M. P. T., ...	C. M. Schrody, ...	Palace Theatre.
Trafford, ...	M. P. T., ...		Leon McBride.

Buildings.

Allentown, ...	Apartments, ...	Rube & Lange, ...	Sam'l Traylor.
DuBois, ...	Garage and hall, ...	W. H. Overdorf, ...	U. S. V. Logan.
Allentown, ...	Store building, ...	Jordon & Rapp, ...	Mrs. Caroline Ressler.
Charleroi, ...	Store and offices, ...	A. P. Cooper, ...	Dr. F. C. Stahlman.
Reading, ...	Home for boys, ...	Calvin J. Young, ...	"Boys Home."
Eddystone, ...	Apartments, ...	Jas. S. C. Fernald, ...	Sisag Mahjoubian.
Sharon, ...	Store, ...	D. G. Bastress, ...	J. W. Morgan.
Altoona, ...	Store, ...	F. J. Shollar & Son, ...	Welsh Bros.
Wilmerding	Store and apartments, ...	C. C. Compton, ...	F. A. Faller.

York, ...	Mill	J. A. Lichty, ...	Chrystal Hosiery Co.
Sharon, ...	Store building, ...	D. G. Bustress, ...	J. W. Morgan,
Allentown, ...	Factory, ...	Jacoby & Weishampel, ...	Jas. K. Bowen,
Reading, ...	Factory, ...	H. G. Mohn, ...	J. W. Weldner,
Columbia Cross Roads, ...	Hall, ...	Olis Dockstader, ...	L. O. O. M.
Harrisburg, ...	Store and apartments, ...	M. I. Kusc, ...	N. Freidburg,
Connellsville, ...	Factory, ...	John W. Ferguson Co., ...	Specialty Silk Co.,
Reading, ...	Cafe and apartments, ...	Wm. A. Fink, ...	P. Barbey & Son,
York, ...	Factory, ...	T. J. Pardy Construction Co., ...	Standard Chain Co.

Bakery.

Donora, ...	Bakery, ...	C. D. Cooley Co., ...	Adolph Kapp,
Philadelphia, ...	Bakery, ...	John M. Hoepf, ...	T. Reeh,
Philadelphia, ...	Bakery, .....	.....	D. Fred Kulm,
Junata, ...	Bakery, .....	.....	M. G. Aichelmann,
Northampton, ...	Bakery, ...	T. H. Moyer, ...	M. Segal,

Exhaust System.

Reading, ...	Shops, ...	C. A. Bingham, ...	P. & R. R. Co.
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Summary.

Fire escapes, ...	47
Theatres, ...	10
Buildings, ...	18
Bakeries, ...	5
Exhaust systems	1
Total, ...	81

Fire Escapes Ordered by Bureau of Inspection During the Month of August.

Town.	Location, Name and Address.
Milford, ...	Summit Hotel, Louis F. Ragot.
Eaglesmere	Raymond Hotel, M. S. Kiess.
Childs, ...	Stone Silk Co., B. S. Stone.
Emporium, ...	James P. Creighton, P. O. Block.
Shamokin, ...	H. P. Conley, P. O. E. Lodge.
Monessen, ...	T. W. Seanor, Cor. 5th and Schoonmaker Streets., (Hotel.)
Butler, ...	W. G. Zeigler, Cunningham Street, (Printing Shop.)
Butler, ...	Proutman & Son, (Dry Goods Store.)
New Castle, ...	Arthur Quimby, 15 Liberty Street, (Hotel.)
Noblestown, ...	Mrs. Feick, Mill-Road Cross Street, (Hotel.)
Wilkesburg, ...	Mrs. L. Steel, 937 Rebecca Street (Store and Flats.)
Trafford, ...	F. M. McBride, 531 Cavitt Avenue, (Store and Flats.)
Carnegie, ...	Gilbert Martin, Main and Broadway, Stores, Hall and Flats.
Butler, ...	Standard Steel Car Co., J. H. Alliman.
Oak Lane, ...	Oak Lane Country Day School, John R. French.
Belleville, ...	Eagle Hotel, G. E. Brindle.
Conneaut Lake, R. F. D. No. 48	Estate of Sylvester McGuire.

Inspection of Foundries.

Special inspectors of the Department of Labor and Industry, who are experts in foundry practices, continue their work throughout the State and a tabulation of instructions issued and compliances received shows that a large amount of territory has been gone over and splendid results attained.

Dangerous conditions and unsafe practices exist, however, and suggestions for correction are given to both employer and employe.

Having in mind first the health of the workmen, the foundry inspector looks carefully into the conditions of the wash and toilet rooms and the ventilation and lighting conditions. In the wash rooms inspectors have discovered many old wooden lockers containing "sweaty" working clothes, piled indiscriminately and a veritable nest for vermin.

The condition of the toilets is given careful consideration and suggestions are made to the owners. Probably the most filthy condition is discovered in the trough, termed in the old foundries the "Bosh," used for filling the sprinkling cans with water for tempering the sand. The water is allowed to stand for days and weeks in these iron receptacles and, becoming stagnant, affects the health of the workers. These conditions do not exist in the modern foundries where improved

toilet conveniences in wash rooms and sand tempering tanks have been installed.

Another matter which is most neglected by foundrymen is the adoption of proper methods to prevent accumulation of dust and filth on the rafters of the foundry roof. This condition prevails generally in foundries where the roof and rafters are constructed entirely of wood and usually the lower chord of the truss is very broad, and the dust from the foundry sand accumulates upon the upper side of this timber in large quantities. The chilling of the iron in the molds produces a vacuum when the air rushes through the vents causing an explosion which jars the accumulation of dust from the rafters and precipitates it upon the workmen. This dust no doubt contains numerous disease germs.

The absence of a first aid room is a condition which exists in a number of foundries and, in such cases, the injured man is sometimes carried to the office, which is usually a small room where there may be one or two women stenographers.

Inadequate facilities for handling heavy loads and hot metals are responsible for many injuries and severely tax the health of the average workman. The practice of crowding around the mouth of the cupola, to catch the molten metal in the hand ladles, is a bad one and should be abolished. The metal should be poured from the receiving shank into the hand ladles after the cupola is closed. This would avoid the splashing of the molten metal which has caused so many workmen to be burned. The inspectors have paid particular attention to the width of the gangways and find that the greatest trouble exists in the bull ladle aisles between the workmen's floors. This condition is found usually where the sand is tempered and the piles adjoin, in which case a space of probably one foot is allowed on either side of the pile. This is considered a single hand-ladle aisle but is not wide enough for the purpose and causes considerable stumbling. In such cases the inspectors made special efforts to correct this condition and have all of the aisles conform to the Safety Standards of the Industrial Board.

At this time of the year special attention is given to the entrances of foundries, which, from November 1 to April 1, must be protected by covered vestibules. The foundries, which, prior to the close of the last winter season, had not been equipped with the storm doors and vestibules as required, have started work and it is expected that, with few exceptions, the foundries throughout the State will have complied with this requirement.

Inspection of Elevators.

During the month of August there have been received and checked by the Elevator Inspection Division, 2,312 inspection reports from the various Insurance Companies, carrying these risks in the State of Pennsylvania. These reports after being received, are carefully checked, and all installations in which are found dangerous or hazardous conditions, endangering the riding public, are immediately ordered repaired or replaced, in accordance with the requirements of the State Elevator Code.

There have also been received and approved, plans and specifications, covering the installation of 92 new elevators of various types, together with approximately 37 sets of plans, which are being held for correction.

The greatest difficulty in connection with this work at the present time, lies in establishing between this Department and the various elevator companies, a correct understanding as to the requirements of the Safety Standards, No. 17, known as the Elevator Code, of the Industrial Board of Pennsylvania. The work, however, is progressing smoothly, and, with one or two exceptions, all elevator companies have responded, in a very creditable manner, to the requests of the Elevator Inspection Division.

The proper safeguarding of all elevator installations will do much toward reducing to a minimum, the fatalities, which have so frequently occurred in the past. Only recently in a building in course of erection, the elevator equipment was being used in an uncompleted condition. As a result, a workman stuck his head out of a window, which was unguarded and opened into the shaft way. A few seconds later, as the elevator ascended, the descending counterweights crushed his skull, and so badly mutilated him, that death resulted two hours later.

This should be an object lesson to all elevator companies and owners, not to accept or use any elevator installation in an incomplete or unguarded condition. Had the shaft way openings been complete and properly guarded, this accident could not have happened.

Inspection of Boilers.

During the month of August 3,156 boiler inspection reports were received in the Division of Boiler Inspection. These inspection reports are divided into 1,606 internal and 1,550 external inspections. There were nine boilers suspended from further operation until necessary repairs could be made and they could be put into proper working condition. There were 1,202 defects discovered of which 107 were of

serious character and required immediate attention. Among the conditions reported were the following:

	Dangerous	Ordinary
Scale, ...	56	353
Internal Corrosion, ...	36	130
External Corrosion, ...	4	34
Pitting, ...	6	132
Grooving, ...	0	8
Tube Ends, ...	0	119
Furnaces, ...	1	94
Fractures, ...	0	2
Water Gauges, ...	0	9
Safety Valves, ...	0	9
Pressure Gauges, ...	0	23
Broken Stays, ...	0	82
Bulges, ...	0	89

A controversy arose in August over the pressure allowed in a boiler by a casualty company and the amount of pressure the original capacity of the boiler would permit. An inspector of this Department was sent to inquire into the case. It developed in this particular case, that a patch 48" by 48" put on the boiler was considerably thinner than the original sheet and was single-riveted. The casualty company's inspector established the data for the amount of pressure allowed by figuring upon the weakest place in the boiler which was at the patch. Hence the original allowable pressure for the boiler was diminished. The inspectors, in this Division, are checking up all such differences and endeavoring to educate the public to the fact that only the allowable amount of pressure is safe.

KEEPING THE SHOP IN A SAFE AND EFFICIENT CONDITION.

The safeguarding of dangerous machinery and places, and the education of the workmen along safety lines are universally recognized as the two most important factors to be considered and given attention if any accident prevention campaign is to be successful.

It is plainly evident to most persons that, if the installation of safeguards is carried out to the highest point of efficiency and there

are still careless workmen, a large number of accidents are sure to occur. Conversely, if workmen are thoroughly alive to the need of doing all their work in a careful manner, and earnestly strive to do so, accidents will yet occur in large numbers if the necessary safeguards are not installed.

A careful study, however, of a large number of accidents scattered over an area of diversified industries shows conclusively that a combination of education by means of safety meetings, posters, bulletins, contests, etc., and also by means of the installation of safeguards cannot help but bring results, as the larger proportion of accidents occur from conditions which would not exist, if a system of both education and safeguards were used.

The experience of employers, who have taken up both phases of the work mentioned above and have carried them out in a most efficient manner, also bears out this statement. It has likewise been proved beyond the shadow of a doubt, that education plays by far the more important part.

Owing to the constant change of workers in any establishment it is sometimes difficult to reach every new employe within a reasonable length of time. The fact remains, however, that if there has been a proper esprit de corps, along safety lines, instilled into the workers it will take only a short time for the new employe to be permeated with that same feeling or else the attitude of the other employes will force him to find more congenial surroundings.

Such an esprit de corps will never be found in an establishment in which the official heads say "We want a safe shop" and then turn to their lower officials or foremen and say "We want production at any cost and we don't care how you get it." In such an establishment accidents are bound to continue and will do so until the slogan "Safety is Paramount" has been adopted.

An efficient safety organization which receives official recognition has been found to be, possibly the most important means of obtaining such a spirit among employes, and where its work has received the persistent and earnest support of the management it has shown its worth.

Of course its whole object is to keep the place of work in a safe condition. How best then can it accomplish this purpose? Many different plans have been adopted and have been more or less successful, yet nearly every one grows stale after a time and the employes lose interest.

The following general plan, however, is suggested as being one which seems to be the most successful for obtaining the help and co-operation of each employe with the safety organization and also as the best means of stimulating the minds of the workmen to think

safety at all times. Practically some detail of the plan has been tried out and proved successful in some places so that no originality is claimed for it. The whole purpose of presenting it now is simply to show a method which has proved successful and which can be applied to all plants alike, whether large or small. It is also not supposed to supplant the formation of a safety organization or of any other means such as bulletins, meetings, motion pictures, etc., which might be useful in presenting safety to the man most concerned.

Erect at suitable and prominent places throughout the plant a suggestion box fitted with lock and key wherein employes can deposit slips on which they have written suggestions for improvements or changes which would in their opinion improve conditions. A notice similar to the following should also be posted:

Employees
Your Health and Safety
are your
Greatest Assets.
We Wish to Protect Them. Will You?
Report Immediately on Slips Provided
**ALL UNSAFE, UNSANITARY OR UNHEALTHFUL
CONDITIONS IN THIS PLANT.**
Place Slips in Box. They Will Receive Careful Consideration.
Signed.....
Supt.

The following form of blank slips which should be at some convenient place at each box is suggested:

Date.....

Blank & Bank Co.,
Everywhere, Pa.

Gentlemen:

I wish to call your attention to the following conditions in our plant which I believe should be changed:

[illegible]

Name.....

Employee is requested to sign his name. However the suggestion will receive consideration if not signed. (Over)

The reverse side of this blank could contain notices of prizes or rewards which would be given for valuable suggestions and these prizes can be given in various ways as the local conditions warrant. It is best, however, to give some token for each reasonable suggestion whether adopted or not and then give a greater prize for the best suggestion in a month's time either by departments or the plant as a whole. Safety buttons, watch fobs, etc., are usually earnestly sought for and employes will think hard in order that they can offer a suggestion which will earn them such a prize. Small money prizes also have a stimulating effect.

It is likewise desirable that each suggestion be passed upon by a committee of the men themselves and that recommendation or disapproval be obtained. Whatever is finally done with the suggestion, the person who gave it, if his name be known, should receive a letter of acknowledgement which would tell of the disposition of the suggestion and, if it was not adopted, the reasons why this action was taken.

A public notice on the bulletin board giving this information is also desirable and will do wonders in promoting the confidence of the men in the management.

The scheme can be carried still further by establishing a contest between the various departments and having them strive to outdo each other in offering suggestions which are worth while adopting. Such a contest might have a standing of departments as follows:

Week Ending	Suggestions offered.	Suggestions accepted.	Standing.
19			
Wood shop, ...	3	3	1.000
Brass shop, ...	6	5	.833
Machine shop, ...	4	1	.250
Repair gang, ...	2	0	.000
Officials, ...	0	0	.000

There will be an earnest effort on the part of the men to excel one another if the proper attitude and prominence be given the matter by those in charge. Where a corporation has several plants, superintendents could be stimulated in this way to keep up their "batting average." If their batting average is high their accident curve is sure to decrease.

Not only can suggestions be received for making the shop safe but the plan can embrace suggestions which would better working conditions, increase production or anything else that would increase efficiency.

The wise employer realizes that he can learn much to his advantage from the man who works for him, and it is thought that this method of stimulating the worker to think for the mutual advantage of all is a practical one and one which would also be instrumental in promoting more personal relations between those in authority and those who work for them. Such a relation would help to solve many of the labor problems of the day.

HOW WILLIAM SELLERS AND COMPANY, INCORPORATED, OF PHILADELPHIA, VIRTUALLY ELIMINATED BURNS ON THE FEET AND LEGS OF THE EMPLOYEES, IN THEIR FOUNDRY, BY INSTITUTING A GENERAL SAFETY CAM- PAIGN.

By ALEXANDER E. OUTERBRIDGE, JR., *Mettalurgist*.

More than ten years ago, William Sellers & Company, Inc., manufacturers of machine tools of Philadelphia, Pa., recognizing the growing need of a "Safety First" campaign, in their works, for the education of their employes, commenced to keep systematic records of all accidents occurring in all the departments. At the same time there was inaugurated a system, analogous to what is now known, in some large establishments, as a "Welfare Department," the main purpose of which was to give personal attention to men injured, to visit their homes and look to the welfare of their families while they themselves were incapacitated for labor.

Blank forms were prepared and all bosses were instructed to submit brief accounts of all accidents to the superintendent within twenty-four hours. An inspector immediately investigated such accidents and prompt measures were taken to preclude the possibility of repetition thereof.

A detailed summary was prepared each year, showing the number of accidents and, at the end of the first six years, an elaborate compilation was made giving the total number of accidents, classified under different headings, with percentages of same and showing the

proportion, per hundred employes, of such accidents each year. The knowledge thus gained was both surprising and valuable. More than fifty per cent of all the accidents were shown to have been clearly preventable by the exercise of ordinary care and the largest single cause was due, not to operation of machinery at all, but was found under the head of "falling objects" being almost exactly thirty-three per cent of the total number of accidents during the six year period.

The immediate result of the information thus acquired was the preparation of a circular letter, issued to the foremen giving instructions regarding their responsibilities, as well as those of their men, for the future prevention of such accidents, and later compilation of records show gratifying decrease in number of accidents from all causes, per hundred employes, since commencement of the records. This decrease is due partly to the result of the campaign of education which has been persistently carried out, causing a new spirit of caution to supplant the former one that prevailed to some extent of "taking chances" and partly to the complete methods adopted for preventing accidents by providing guards for gears and other moving parts of machinery.

The six year compilation, already alluded to, showed that the largest cause of accidents in the foundry was due to "burns on legs and feet" from molten iron splashed from ladles or spurting from imperfectly closed molds. To cite a single case, a young married man who had worked three days only in this foundry spilled some molten iron over his shoes, which were old and cracked, causing painful burns on both feet. Notwithstanding prompt treatment at a hospital, blood poisoning set in and the man was incapacitated for many weeks.

Inquiries were immediately sent broadcast for any practicable protectors for preventing such accidents. When it was found that none was to be obtained, experiments were at once made by the metallurgist with asbestos cloth and other materials with some surprising results. Boards about one foot wide and two feet long were placed upright at an angle on the floor of the foundry and various fabrics tacked upon them. Molten iron was then dashed (not poured continuously) over these surfaces. It was soon found that closely woven smooth faced fabrics (though combustible when exposed to a candle flame) shed molten iron like water from a duck's back. Even a sheet of paper was subjected to this "trial by fire" several times without flaming. It was at once recognized that here was a valuable discovery which offered a solution of the problem.

Leggings of special form having a wide cape or extension covering the foot were designed and ordered to be made of closely woven canvas by a large military equipment establishment. The first dozen pairs were received early in 1912 and were put into use in May. The

laborers carrying molten iron were at first not ordered to wear these protectors, which were supplied free of cost, but they understood that if they neglected to do so and were burned on legs or feet they need not expect to receive pecuniary assistance which was freely given to the young man mentioned herein.

The protectors are, to this day, worn by all men carrying molten iron in the foundry.

Four years and eight months have now elapsed since the closely woven leg and foot protectors were first put into daily use and there is yet to be recorded the first case of any man losing any time from burns on legs or feet from splashed molten metal while wearing the protectors, notwithstanding that molten metal has splashed over the protectors countless times. This is a truly remarkable record.

On January 21, 1913, the President of Wm. Sellers & Company, Inc., in answer to an inquiry regarding foundry accidents from M. N. Alexander, Chairman of the Committee on Safety and Sanitation, National Founder's Association, West Lynn, Massachusetts wrote as follows:

"We shall be glad to co-operate with you by sending you copies of our Foundry Accident Reports in the manner you request. The burns were nearly all on feet or legs, due to splashing iron. For about a year past we have entirely eliminated burns of this character by insisting that the men shall wear canvas leggings which we provide. These leggings have a large cape which covers the boot well and the molten iron does not adhere to them. We have only had one pair of leggings at all injured in this way and the wearer was evidently saved from a severe burn."

Mr. Alexander at once sent an inspector to the foundry of William Sellers & Company, Inc., who said that he had visited numerous iron and steel foundries in various parts of the country but that he had never seen or heard of any such canvas protectors. He photographed the men lined up at the cupola, all wearing the canvas leggings and he also obtained a pair for a sample. Subsequently, Mr. Alexander brought out a design of leg protector, made of the same material but minus the foot covering cape; these leggings are intended to be worn with Congress shoes only.

Lectures given the employes during August, were illustrated with lantern slides courteously loaned by Dr. Francis D. Patterson, Chief of the Division of Hygiene and Engineering, Department of Labor and Industry, Harrisburg, Pa.

In the concluding portions of safety talks given the employes, various important features of the new labor laws in Pennsylvania were explained to the men together with the most recent decisions affecting compensation for injuries. Thus it was stated that "rough house"

or "horse play" must be eliminated as it not only leads to serious accidents but bars the victim from receiving any aid whatever.

Attention was called to a clause making it a criminal offense, subject to heavy fine and imprisonment for an operative to remove or tamper with any protective device furnished by an employer to any machine or tool.

PREVENTABLE ACCIDENTS.

An employe of a large steel company, regardless of the rules of the company prohibiting "horse play," lay upon his stomach under an elevator gate with his head extended over a coke hoist shaft endeavoring to hit with mud balls, a fellow employe working on the mixer floor immediately below. While in this position the hoist descended from the top floor crushing his head between the bottom of the hoist and the edge of the floor.

Suggestions:—Strictly obey all safety rules—play the safe, cautious game at all times and at all places.

* * * *

An employe of a steel company, whose duty was loading cold rolled steel on cars, climbed into a car to smoke.

The steel is coated with grease to prevent it from rusting, and to protect his clothes from grease, he wore a burlap apron. In lighting his cigarette the match fell from his hand upon his apron, setting it on fire and before the fire was extinguished he was so badly burned that he died two weeks later.

* * * *

A large number of fatal accidents are caused by employes being permitted to work when they are partially incapacitated from illness.

No employe should be permitted to remain at work near moving machinery, or in any other place of danger, if suffering from illness.

This should apply not only to serious illness but to slight, indisposition, because faintness or dizziness, that deprives the employe of the full use of his faculties, may result in severe injuries.

Regardless of how slight the illness may be, the employe should be sent home or to the plant hospital for treatment, if the plant maintains one, and should be permitted to return to work only upon the direction or order of the physician in charge of the case. The

foreman should, before permitting any one to perform any hazardous work, especially if at any height, be positive that the one ordered to do the work is in good health.

Recently an employe, feeling a trifle nauseated when he reported for work, was permitted to go on a swing scaffold to point a wall. When up three stories he had a second attack of nausea and fell from the scaffold striking his head on the pavement causing instant death. Had the man been sent home or to a doctor this accident would no doubt have been averted.

* * * * *

Failure on the part of an employe to report a slight laceration of his finger, and to have it treated resulted fatally.

This man was engaged in driving a dump wagon, and in some manner his finger was caught in the ratchet. Instead of having the wound treated he continued to work. Blood poison developed with the above result.

It has been learned since the man died, that at the time his finger was injured there was a case of erysipelas in his home, and infection may have been due to this source.

All wounds, regardless of how trivial they are, should be treated at once.

* * * * *

An employe of a manufacturing concern while walking across a narrow rail track, stumbled and fell against the arm of the contact shoe, of a small electric engine, which was charged with 230 volts.

He arose, walked about ten feet when he fell unconscious, dying a few hours later.

Since the accident, a safety appliance has been installed.

* * * * *

Too much stress cannot be placed on the need for organization, education and inspection for safety, to the end that all accidents similar to the following may be eliminated.

An errand boy, employed by an engraving company, was returning from an errand and in coming through the hallway on the first floor, stopped at the elevator and it is supposed that he playfully hoisted the freight elevator gate, lost his balance and fell to the bottom of the shaft a distance of about 10 feet, fracturing his legs and skull, besides receiving internal injuries. Death resulted a few hours after the accident occurred.

* * * * *

On January 24th, a nail penetrated the foot of an employe. Slight attention was given to the wound and he continued to work. Infec-

tion set in, blood poisoning developed and after months of suffering he died June 6th.

Never neglect giving attention to a wound, however slight.

* * * * *

An engineer in an establishment located in Philadelphia, after completing his work for the day went home. He had occasion to return to the plant and in going down the cellar stairs slipped and fell to the bottom of the stairway, fracturing his skull, which resulted fatally.

Since this accident handrails and new treads have been placed on the stairway. Provide handrails and keep treads on all stairways in good condition.

* * * * *

An employe engaged in removing 4" x 4" timber from a roof, preparatory to remodeling the building, failed to remove a 12" bolt from one end of the timber. When he threw the timber from the roof, the bolt caught in the leg of his pants pulling him off the roof to the ground, a distance of 20 feet, injuring his hip and back so badly that death resulted a few weeks later.

* * * * *

A messenger boy employed in a foundry, with other boys, was in the habit of stopping at a small tool room and fooling or teasing an Italian who tests air hammers and air rammers. On this particular occasion the Italian in his endeavors to put the messenger out of the tool room pulled down the air hose and shoved it behind the boy and turned on the air which entered the boy's anus, perforating the bowels. Death resulted the next day.

* * * * *

Notwithstanding strict orders not to oil machinery while in motion, an employe of the Bureau of Water, in one of the large cities attempted to refill the grease cups in the pit of the coal conveyor, while the conveyor was in motion. After opening the trap door he got on his knees and leaned down the opening into the pit along the side of the vertical conveyor. The conveyor caught his clothing, and drew him into the pit. He was found ten hours later with the upper part of his body crushed and his feet sticking up through the opening of pit.

* * * * *

An engineer for a stone quarry company turned off the steam,—as he supposed,—to oil the eccentric of his engine. As he reached through the spokes of the flywheel, the engine suddenly started, amputating his arm, and throwing him against the driving rod,

crushed his skull. After the accident it was discovered that he had not closed the operating valve tight enough, and sufficient steam accumulated through the space to start the engine. Always be sure—positive—that valves are entirely closed then go ahead.

* * * * *

Two employes of a railroad company were engaged in painting the girders on the side of a crane runway. Instead of using the ladder which extended down from the roof on a nearby building the two employes went forty feet out of their way to reach another roof, and in crossing a narrow girder, came in contact with high tension wires and were electrocuted.

* * * * *

The need of proper signals for the protection of the men engaged in loading and unloading cars is again emphasized by the following accident that occurred recently in the plant of a large bridge manufacturing company.

An employe was engaged in unloading a car of coal, at the locomotive coal bin, when a train of cars bumped into the car throwing the workman into the hopper of the car, dragging him a distance of about one hundred and twenty feet and causing fatal injuries.

Had a signal been placed on the end of the car in which the employe was working, the accident would have been prevented.

No one should be permitted to work in or about cars without placing signals on the ends of the cars.

* * * * *

The master mechanic of a limestone company, having placed a spout conveyor from the bulk bin to the vertical elevator, was closing a hole, which he had made, in the guard over the main driving belt to protect the workmen from being injured by coming in contact with the belt. Immediately over his head was an 8" sprocket wheel on a shaft 3 feet high,—which was in motion.

The foreman advised him to shut down the machinery until he made the repairs, but he claimed there was "no danger." As he arose from a stooping position, his coat caught on the sprocket wheel which whirled him around killing him instantly.

BUREAU OF EMPLOYMENT ESTABLISHES UNIFORM RECEIPT BLANKS FOR PRIVATE EMPLOYMENT AGENCIES.

The Bureau of Employment of the Department of Labor and Industry, among its duties, prescribes rules and regulations for the administration and operation of all commercial employment offices. The Bureau has formulated a standard receipt form which must be used by all employment agents doing business for profit. One of these receipts must be given to each person from whom the agent has accepted money or other thing of value, and a duplicate must be kept on file. The distinctive features of this receipt, when it is filled out in full, are many. It will contain data that are necessary to make more effective efforts of the Bureau to standardize records of commercial agencies. It will act as a guide for applicant and agent and be a full record of the transaction the agent has with an applicant either for help or work. The duplicate which the agent keeps, will be inspected at intervals by the Bureau's investigators.

This receipt will do away with as many receipts as there are licensed agents, as at the present time each agent uses a special form. Some of these receipts are in the form of an agreement and receipt combined while others are simple receipts. Few of them show just what an applicant has paid his or her money for. This haphazard system of doing business puts not only the applicant at the mercy of the agent, but also the agent at the mercy of the applicant.

The study of 265 cases of dispute that came to the Bureau made it doubly necessary to adopt a receipt form which would contain full data so that justice could be dealt out with equity to agent and applicant and would raise the standard of this business as a whole to a higher plane than it has ever been in this State.

The receipt calls first for the name and address of the applicant, the sum paid for obtaining for the applicant permanent or temporary employment. It calls for the name of employer or firm and the address, also for the name of the person giving the order to the agent. This is very necessary owing to the fact that many agents on receiving applications for work have been in the habit of sending applicants to persons who have advertised in the newspapers and have not given the agent the order for such a person. It is also very necessary to have the name and address of the person giving the order to the agent in case the adjuster must get evidence from the employer or the person who is acting for him.

The receipt also calls for the wages or compensation per hour, day week, month or year, as the case may be. The applicant may be sent to a place where board is included or where board and room are included. There is also a space which can be filled in with this information.

The next line shows the services to be performed by the employee. This may seem superfluous, but many cases have come to the attention of the Bureau where agents have sent an applicant to perform one kind of service and when the applicant arrived, he found that the services to be performed were entirely different from those for which he had been sent.

The next line shows the location of the work. This is very necessary owing to the fact that many men and women alike have been instructed to report to a certain place and the location of their work proved to be many miles from there.

The next line shows to whom the applicant reports and the cost of his transportation, if any. This is in accordance with Section 13 of Act 397, which says "if any person fails, through no fault of his own, to obtain employment from the employer to whom he has been referred by any employment agent, or, after having been engaged by an employer, is not permitted by said employer to enter upon such employment; the whole amount paid by such person to the employment agent as a fee, or for transportation or other expenses, shall be refunded to him on demand."

The next line is for the name of agent, his address and license number.

On the face of this receipt, or on the reverse side, are five rules made in accordance with the law, which are for the guidance of both agent and applicant and are as follows:

First: "No registration fee, or fee in lieu thereof, shall be charged." This is in accordance with Section 11 of the Act.

Second: "No fee, money, or other valuable consideration shall be accepted or demanded by the agent until the applicant has been referred in good faith to a position for which he has applied and for which the agent has an order from the employer."

This rule was made under the power given the Commissioner in Section 8 and is for the purpose of protecting the applicant from having his fee taken by an unscrupulous agent, and getting no services in return. The man and woman who pay out money for a position, certainly need all that they may have, and cannot afford to lose any of it, small as the amount may be. The Bureau was also prompted in making this ruling from the fact that one agent alone

stated that before this law came into effect, he had received over 1,200 applications for work for which he charged a fee of one dollar each, and had actually secured work for less than two hundred of them. Giving the agent the benefit of the fact that he might have made some endeavors to find work for this vast number of people and that these endeavors were a source of some expense, yet the applicant did not receive one cent's worth of services for the dollar he had expended.

Third: "No fee other than that authorized by the Commissioner and stated on the schedule of fees posted in the agent's office, shall be charged the applicant."

When application is made to the Bureau for a license the agent states the amount he wishes to charge for his services. The Bureau does not always allow just what an agent would like to have and feels that it has been very lenient in approving certain schedules of fees. Each schedule of fees is posted in the office of the licensed agent on a large placard provided by the Department.

Fourth: "If, through no fault of the applicant, he fails to obtain employment from the employer to whom he is referred; the full amount of the fee, transportation and other expenses shall be refunded to the applicant on demand."

This is also in accordance with Section 13 of the Act and will prevent the practice of agents taking an applicant's money and shipping him, in some cases miles away from his city, where he finds upon arriving that the agent has never been appealed to by the prospective employer and also that there is no work to be had. Many of these cases have been brought to the attention of this Bureau and refunds have been made to the applicant by the agent.

Fifth: "Each applicant must be given a receipt as provided by law whenever any money is paid."

This is in accordance with Section 12. As stated above, with very few exceptions, agents have been giving receipts and many of these are the very common receipt form that can be purchased from any stationery store. The writing on them is usually unreadable and they are not worth the paper they are written on.

Under these rules or citations of the law appear the name of John Price Jackson, Commissioner, and his address at Harrisburg and the name of the director, same address. These are included so that any aggrieved person may know to whom to appeal for an adjustment of his complaint. The Department feels that any agent who wishes to elevate his business, which is a legitimate and necessary one, and

who is honest in his dealings, need have no reluctance to use the receipt.

This ruling is not an extreme measure and the average agent will undoubtedly find that he is better satisfied after six months with this system of conducting his business, because it will put him on a plane above the reproach and condemnation such as many unscrupulous agents have brought upon themselves in the past.

The letter and receipt form sent from the Employment Bureau to the commercial agents are as follows:

To All Employment Agents:

Enclosed please find copy of receipt form, which will be the standard to be used by all employment agents in the State, doing business for profit. The use of this form of receipt is compulsory.

This copy is sent you so that you can have the number you feel you will have use for, printed at your own expense, in the identical form and wording as it is herewith submitted. A printed copy of this receipt must be submitted to this Department with the application for a renewal of license, which application must be in the hands of this Department not later than the 1st day of October, 1916.

All agents at the present time holding licenses must cease doing business on the last day of September, unless they have complied with the above requirements in full.

AGENT'S DUPLICATE.

No.....

Date, ...191.....

RECEIVED from Address
 the sum of \$..... for obtaining for applicant permanent, temporary
 position as

with Address
 (Name of Employer or Firm.)

Name of person giving order to agent

Address Wages or compensation per
 hour \$..... day \$..... week \$..... month \$..... year \$.....
 is board included is room included

The services to be performed are

Location of work

Applicant reports to

Cost of transportation \$.....

Name of Agent

Address License No.....

(1) No registration fee, or fee in lieu thereof, shall be charged.

(2) No fee, money, or other valuable consideration shall be accepted or
 demanded by the agent until the applicant has been referred in good faith to a
 position for which he has applied and for which the agent has an order from the
 employer.

(3) No fee other than that authorized by the Commissioner and stated on the
 schedule of fees posted in the agent's office shall be charged the applicant.

(4) If, through no fault of the applicant, he fails to obtain employment
 from the employer to whom he is referred; the full amount of the fee, trans-
 portation and other expenses, shall be refunded to the applicant on demand.

(5) Each applicant must be given a receipt as provided by law whenever
 any money is paid.

John Price Jackson,
 Commissioner,
 Department of Labor and Industry,
 Harrisburg, Pa.

Jacob Lightner,
 Director,
 Harrisburg, Pa.

NOTICE TO AGENT: Use ink in filling out receipt.

APPLICANT'S RECEIPT.

No.....

Date, ...191.....

RECEIVED from Address
 the sum of \$..... for obtaining for applicant permanent, temporary
 position as

with Address
 (Name of Employer or Firm.)

Name of person giving order to agent

Address Wages or compensation per
 hour \$..... day \$..... week \$..... month \$..... year \$.....
 is board included is room included

The services to be performed are

Location of work

Applicant reports to

Cost of transportation \$.....

Name of Agent

Address License No.....

(1) No registration fee, or fee in lieu thereof, shall be charged.

(2) No fee, money or other valuable consideration shall be accepted or
 demanded by the agent until the applicant has been referred in good faith to a
 position for which he has applied and for which the agent has an order from the
 employer.

(3) No fee other than that authorized by the Commissioner and stated on the
 schedule of fees posted in the agent's office shall be charged the applicant.

(4) If, through no fault of the applicant, he fails to obtain employment
 from the employer to whom he is referred; the full amount of the fee, trans-
 portation and other expenses, shall be refunded to the applicant on demand.

(5) Each applicant must be given a receipt as provided by law whenever
 any money is paid.

John Price Jackson,
 Commissioner,
 Department of Labor and Industry,
 Harrisburg, Pa.

Jacob Lightner,
 Director,
 Harrisburg, Pa.

NOTICE TO AGENT: Use ink in filling out receipt.

AUGUST RECORD OF EMPLOYMENT BUREAU.

The Bureau of Employment of the Department of Labor and Industry placed 1,508 unemployed persons, in Pennsylvania, in positions during the month of August.

The total number of employes requested by employers, during the month of August, was 3,687. Applications for positions were received from 2,535 workers of whom 1,703 were referred to positions. This work was accomplished through the five offices of the Bureau located at Harrisburg, Philadelphia, Pittsburgh, Johnstown and Altoona. The report, for each of the offices is as follows:

HARRISBURG.

Total number of persons asked for by employers,	795
Number of applications for positions, ...	342
Number of persons referred to positions, ...	207
Number of positions filled, ...	188

PHILADELPHIA.

Total number of persons asked for by employers,	797
Number of applications for positions, ...	1131
Number of persons referred to positions, ...	820
Number of positions filled, ...	713

JOHNSTOWN.

Total number of persons asked for by employers,	185
Number of applications for positions, ...	90
Number of persons referred to positions, ...	67
Number of positions filled, ...	54

PITTSBURGH.

Total number of persons asked for by employers,	1373
Number of applications for positions, ...	918
Number of persons referred to positions, ...	585
Number of positions filled, ...	529

ALTOONA.

Total number of persons asked for by employers,	537
Number of applications for positions, ...	54
Number of persons referred to positions, ...	24
Number of positions filled, ...	24

WORKMEN'S COMPENSATION BOARD ADOPTS DEFINITION FOR "MAJOR SURGICAL OPERATION."

The Workmen's Compensation Board has adopted the following definition of the term "Major Surgical Operation." This definition was drafted by Dr. Francis D. Patterson, Chief of the Division of Hygiene and Engineering of the Department of Labor and Industry, with the assistance of the following committee of physicians:

Dr. John M. Baldy, President, Bureau of Medical Education and Licensure of the Commonwealth of Pennsylvania.

Dr. J. B. McAlister, Former President, State Medical Society, Harrisburg, Pa.

Dr. W. L. Estes, Surgeon to St. Luke's Hospital, South Bethlehem, Pa.

Dr. Robert G. LeConte, Surgeon to Pennsylvania Hospital, Philadelphia, Pa.

Dr. Edward Martin, Professor of Surgery, University Hospital, Philadelphia, Pa.

A major operation is a surgical procedure which entails immediate serious consequences to the patient and which requires skill and training to perform and includes:

1. The setting of fractures of long bones and reducing of subluxations, providing accuracy and efficiency of reduction be demonstrated by x-ray taken before and after surgical treatment.

2. All operative procedures, other than finger and toe amputations, cleansing and draining and closing wounds, evacuating pus by incisions, the manipulating and reduction of uncomplicated dislocations, the treatment of uncomplicated fractured ribs, the removal of superficial foreign bodies from the eyes, and the removal of sub-cutaneous foreign bodies.

Note: All fees for a major surgical operation shall be limited to such charges as are reasonable for similar treatment of injured persons of like standard of living in the same community, and where such treatment is paid for by the injured person himself, the charges, including hospital service, to be paid by the employer not in any case to exceed the sum of \$75.

ACCOUNTING SYSTEM OF THE DEPARTMENT OF LABOR AND INDUSTRY.

It is obvious that in a large State department, such as the Department of Labor and Industry, an up-to-date system of accounting is absolutely essential. The Commissioner and the Auditor, have given much time and thought to this end of the Department's activities and as a result the system installed is believed to be equal to that used by any of the large corporations or business houses of the country.

The books and forms used are as follows:

- Voucher Record
- General Ledger
- Individual Ledger
- Expense Voucher
- Voucher Check
- Requisition Blank
- Inventory Card
- Accounting Requisition
- Advancement Requisition
- Direct Requisition

The three forms last mentioned are used for reporting to the Executive Controller, Auditor General, and State Treasurer.

Each voucher is entered on the voucher record sheet and the totals for the month posted to a general ledger. The headings of the voucher record sheet are as follows:

- Date
- Voucher No.
- To Whom Drawn
- District
- Details
- Amount
- Date Transmitted
- Folio
- Advance Account

Appropriation Distribution	{	Department Salaries
		General Expense Fund
		Bureau of Employment Fund
		Industrial Board Fund
		Workmen's Compensation Salary Fund
		Workmen's Compensation Expense Fund
		Department Expenses
		Bureau of Inspection
		Division of Hygiene and Engineering
		Bureau of Statistics
		Bureau of Mediation and Arbitration
		Legal Division
		Industrial Board
		Employment Bureau
		Workmen's Compensation Bureau

By this method it is possible to tell in an instant just what each Bureau is costing and what the available balance is in each appropriation. An account is also kept with each employe in the Individual Ledger. The items on the semimonthly payroll, as well as the monthly expenses, are posted to this ledger. By referring to this ledger it is possible to tell at a glance what each person has drawn in the way of salary or expense from month to month. The Individual Ledger also carries an account with each person doing business with the Department. These books are, of course, balanced each month as well as kept in weekly check with the appropriation accounts of the Auditor General. A monthly statement is also made out and submitted to the Commissioner. This statement shows the available balance in each appropriation, amount of money in the different banks, and the cost of each bureau for the month.

The voucher check system is used in the payment of accounts which require immediate attention.

Accounts not paid in this way are disbursed by the State Treasurer. Separate vouchers are prepared for each account and listed on a summary sheet to be sent to the Executive Controller, the Auditor General, and the State Treasurer.

The following will give an idea as to the course through which a voucher must go before it is paid:—An inspector in the field makes out his account on the regular expense form provided by the Department and submits it to his Supervising Inspector for approval. It is then sent to the office of the auditor where it is carefully checked as to each item of expenditure. The vouchers are then listed on a summary sheet and forwarded to the Executive Controller, who, if he finds the accounts correct, sends them to the Auditor General. The

Auditor General then examines the accounts and passes them to the Treasurer for payment. If the Treasurer is satisfied as to correctness of the accounts, they are returned to the Auditor General who makes out a warrant for the full amount and forwards it to the Treasurer. An individual check is then mailed by the Treasurer to each person rendering an account. The three departments mentioned have been most courteous and helpful at all times and their co-operation has been much appreciated.

It is evident that large quantities of furniture and supplies are needed to meet the demands of the Department of Labor and Industry. All orders for supplies must be made out on the regular requisition blank provided for the purpose. The supplies as received are listed on an inventory card and as requisitions for each article are filled they are entered under the column marked "Consumed." In this way it is possible to tell instantly what quantity of a certain material is on hand.

In connection with the Stock Room is the Multigraphing Division. In this room are located the latest labor-saving devices, such as duplicating machines, addressing machines, letter folding machine, automatic letter openers, etc. Several hundred thousand bulletins, circular letters, and leaflets of information are sent out through this Division during the year. A modern system of filing is also in force. The numerical system is used, divided into subjects. Several thousand pieces of mail are received each day and a large force of clerks and stenographers is necessary in order to handle the correspondence, forms, etc.

A card index is kept of all employees. When a person is employed a card is immediately made out. On this card is entered the name of the employe, position, salary, date of beginning work, etc. In case of resignation or dismissal the same is entered on the card, together with the date and reason.

RECORDS OF BUREAU OF STATISTICS AND INFORMATION SHOW 188,278 PENNSYLVANIA WORKERS INJURED DURING FIRST NINE MONTHS OF THIS YEAR AND 1,827 DIED FROM THEIR INJURIES.

Two hundred and forty-five workers were killed in Pennsylvania's industrial plants during September and 21,949 other employes received injuries that disabled them for periods greater than two days.

An average of these figures shows that during the month of September, 888 workers were injured daily. During the first nine months of this year 188,278 industrial employes in Pennsylvania were injured while at work and of that number 1,827 died as a result of their injuries.

Figures compiled by the Bureau of Statistics and Information of the Department of Labor and Industry show that 203 workers have been killed each month of this year on an average and 20,717 others injured.

The total records of industrial mishaps for the first nine months of this year are as follows:

Accidents Reported to Oct. 1, 1916.

Month.	Killed.	Killed and Injured.	Daily Average.
January, ...	129	13,465	518
February, ...	222	24,475	979
March, ...	239	26,971	999
April, ...	169	18,010	720
May, ...	195	18,379	735
June, ...	182	19,933	767
July, ...	200	21,023	841
August, ...	246	23,817	882
September, ...	245	22,194	888
Totals, ...	1,827	188,278	821
Monthly average, ...	203	20,920	.....

Accidents During the Month of January, 1916.

Industries.	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Trunk.	Head and face.	Eyes.	Arms.	Hands.	Fingers.	Legs.
Building and contracting, ...	29	234	220	133	1	4	40	125	130	127	36	28	80	141	81
Chemicals and allied products, ...	165	163	138	90	.....	14	25	108	81	144	65	38	109	165	50
Clay, glass and stone products, ...	21	138	211	46	2	.....	9	63	42	63	32	24	70	148	35
Clothing manufacture, ...	4	24	47	11	.....	4	5	29	10	37	7	20	22	60	4
Food and kindred products, ...	26	96	172	51	.....	7	6	59	52	27	12	78	30	117	46
Leather and rubber goods, ...	8	34	79	28	1	4	4	25	27	16	7	13	30	68	5
Liquors and beverages, ...	4	27	31	21	.....	1	1	23	25	8	5	11	13	21	14
Lumber and its re-manufacture, ...	5	79	137	53	1	1	7	74	51	25	15	13	45	115	30
Paper and printing industries, ...	17	90	123	32	.....	2	9	40	26	35	11	16	42	117	20
Textiles, ...	21	57	145	24	.....	6	14	42	29	27	10	20	53	116	15
Laundries, ...	2	9	3	2	.....	.....	.....	5	6	1	.....	2	3	5	1
Metals and metal products, ...	848	2,610	2,904	777	14	87	159	1,269	605	651	1,128	339	1,064	2,769	507
Mines and quarries, ...	176	1,852	1,599	635	6	19	123	452	742	606	276	214	540	1,010	504
Public service, ...	134	1,254	565	623	4	7	49	247	503	301	179	115	263	570	297
Tobacco and its products, ...	1	3	1	5	.....	.....	.....	3	2	2	2	.....	5	6	1
Miscellaneous, ...	37	194	256	122	2	4	24	135	111	98	40	45	125	186	59
Hotels and restaurants, ...	3	13	9	11	.....	.....	.....	11	10	3	.....	5	6	9	5
Mercantile establishments, ...	4	27	47	32	.....	2	5	32	31	13	4	11	23	29	15
Jobbers and wholesalers, .....	.....	7	5	6	.....	1	2	7	5	5	.....	.....	5	4	3
Municipalities, ...	1	4	1	4	.....	1	.....	6	6	2	.....	.....	4	1	3
Totals, ...	1,506	6,915	6,748	2,706	31	164	482	2,755	2,494	2,258	1,827	918	2,580	5,658	1,695

Accidents During the Month of January, 1916—Continued.

Industries.	Part Injured.		Loss of Parts.								Degree and Sex.						
	Feet.	Toes.	Eyes.	Arms.	Hands.	Fingers.	Legs.	Feet.	Toes.	Males.		Females.					
										Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.		
Building and contracting, ...	137	26	.....	.....	.....	.....	.....	.....	.....	7	60	717	.....	.....	.....	2	
Chemicals and allied products, ...	89	21	.....	.....	.....	.....	.....	.....	.....	5	34	713	.....	.....	.....	11	
Clay, glass and stone products, ...	54	22	.....	.....	.....	.....	.....	.....	.....	6	24	450	.....	.....	.....	10	
Clothing manufacture, ...	10	2	.....	.....	.....	.....	.....	.....	.....	.....	4	67	.....	.....	.....	49	
Food and kindred products, ...	43	12	.....	.....	.....	.....	.....	.....	.....	.....	24	340	.....	.....	.....	51	
Leather and rubber goods, ...	14	3	.....	.....	.....	.....	.....	.....	.....	.....	1	156	.....	.....	.....	15	
Liquors and beverages, ...	8	3	.....	.....	.....	.....	.....	.....	.....	.....	1	97	.....	.....	.....	1	
Lumber and its re-manufacture, ...	43	10	.....	.....	.....	.....	.....	.....	.....	.....	3	306	.....	.....	.....	34	
Paper and printing industries, ...	28	18	.....	.....	.....	.....	.....	.....	.....	.....	1	267	.....	.....	.....	71	
Textiles, ...	32	7	.....	.....	.....	.....	.....	.....	.....	.....	1	224	.....	.....	.....	6	
Laundries, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	35	399	8,191	.....	.....	42	
Metals and metal products, ...	1,048	557									1	109	386	4,387			
Mines and quarries, ...	673	207									37	419	2,417				9
Public service, ...	462	193															
Tobacco and its products, ...											5						
Miscellaneous, ...	85	25										3	9	655			70
Hotels and restaurants, ...	6	3									1	7	36				6
Mercantile establishments, ...	21	2										20	103				1
Jobbers and wholesalers, ...	9											5	22				24
Municipalities, ...	1											7	9				
Totals, ...	2,766	1,111									213	1,489	19,178				404
											2	21	2				

Accidents During the Month of January, 1916—Continued.

Industries.	Total number of accidents.	Time and Wage Loss.		Number of dependents.	Accidents due to lack of safe- guards.	English speaking.	Non-English speaking.	Language not given.	Social Condition.		Males.	Females.
		Days.	Wages.						Married.	Single.			Not given.
Building and contracting, ...	786	6,079	\$15,677 30	535	1	690	15	81	471	263	52	.....
Chemicals and allied products, ...	763	4,104	10,501 15	663	17	717	12	34	427	318	18	1
Clay, glass and stone products, ...	490	3,351	7,099 65	429	4	432	39	19	264	211	15	8
Clothing manufacture, ...	124	913	1,563 80	45	.....	112	4	8	40	79	5	3
Food and kindred products, ...	417	2,530	5,676 50	329	5	378	12	27	214	181	22	1
Leather and rubber goods, ...	183	984	1,944 64	140	2	175	4	4	100	81	2	.....
Liquors and beverages, ...	108	1,017	2,852 35	130	2	99	3	6	75	29	4	.....
Lumber and its re-manufacture, ...	347	3,294	7,329 60	252	3	312	5	30	219	103	25	7
Paper and printing industries, ...	313	2,588	8,284 20	239	4	294	6	13	150	156	7	2
Textiles, ...	309	1,682	3,012 50	128	6	276	8	25	135	166	18	10
Laundries, ...	21	203	390 75	6	.....	19	.....	2	10	8	3	.....
Metals and metal products, ...	8,668	57,333	135,979 60	7,343	244	7,799	381	488	4,736	3,617	315	29
Mines and quarries, ...	4,862	51,900	125,461 00	3,208	9	1,065	35	3,762	2,933	1,891	38	20
Public service, ...	2,883	34,037	94,424 45	2,920	43	2,667	76	140	1,876	950	57	1
Tobacco and its products	18	214	551 00	10	.....	14	2	2	9	8	1	.....
Miscellaneous, ...	774	5,942	14,151 55	515	13	680	20	74	414	293	67	8
Hotels and restaurants, ...	47	898	1,419 05	32	1	45	1	1	26	16	5	.....
Mercantile establishments, ...	149	1,811	3,555 90	58	1	134	1	14	64	70	15	3
Jobbers and wholesalers, ...	28	558	1,237 40	24	1	26	.....	2	13	8	1	.....
Municipalities, ...	17	399	924 50	7	.....	17	.....	.....	9	6	2	.....
Totals, ...	21,307	179,837	\$442,058 89	17,013	356	15,951	624	4,732	12,181	8,454	672	93
												17

Compensation Accidents Reported in January, 1916, by Injury, Degree, Dependents and Duration of Disability.

Industries.	Nature of Injury.						Part Injured.										
	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Trunk.	Head and face.	Eyes.	Arms.	Hands.	Fingers.	Legs.	Feet.	Toes.
Building and contracting, ...	2	17	24	22	.....	.....	4	10	14	5	1	2	14	14	12	14	3
Chemicals and allied products	3	9	8	7	.....	.....	.....	3	4	4	1	4	4	4	3	5	.....
Clay, glass and stone products, ...	2	7	5	6	.....	.....	.....	7	4	3	.....	2	7	6	2	.....	3
Clothing manufacture, .....	.....	.....	1	6	.....	.....	.....	3	2	3	.....	1	1	3	.....	.....	1
Food and kindred products, ...	2	14	7	7	.....	.....	.....	4	6	5	.....	2	5	9	1	5	.....
Leather and rubber products, .....	.....	2	6	5	.....	.....	.....	.....	2	.....	.....	2	3	4	2	1	.....
Liquors and beverages, ...	2	1	2	2	.....	.....	.....	1	1	1	.....	1	4	10	5	2	1
Lumber and its re-manufacture, ...	2	5	13	9	1	.....	.....	5	8	3	.....	1	4	6	6	2	1
Printing and printing industries, ...	3	3	4	6	.....	.....	.....	3	3	1	.....	1	4	2	2	2	1
Textiles, .....	.....	.....	8	1	.....	.....	.....	2	3	3	.....	.....	4	2	.....	.....	.....
Laundries, .....	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....
Metals and metal products, ...	55	183	126	123	1	.....	3	35	52	27	14	22	55	159	57	94	50
Mines and quarries, ...	14	177	114	82	2	.....	3	54	89	58	16	23	46	77	43	79	16
Public service, ...	5	25	13	15	1	.....	.....	14	17	5	5	4	6	18	9	9	1
Tobacco and its products, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous, .....	.....	13	11	24	.....	.....	2	14	11	4	1	6	10	10	8	13	1
Hotels and restaurants, ...	1	1	.....	5	.....	.....	1	1	1	.....	.....	3	2	1	2	.....	.....
Jobbers and wholesalers, .....	.....	1	.....	4	.....	.....	1	1	2	.....	.....	2	2	3	.....	3	.....
Mercantile establishments, .....	.....	3	2	7	.....	.....	.....	4	7	.....	.....	.....	.....	.....	.....	.....	.....
Municipalities, .....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Totals, ...	91	463	344	332	5	9	13	162	226	119	38	75	168	329	150	236	78
Fatal, ...	4	32	4	21	.....	.....	.....	20	47	24	.....	1	.....	.....	.....	7	1
Serious, ...	87	431	340	311	5	9	13	142	179	35	38	74	168	329	143	235	77

The above table includes only cases where compensation has been paid in full, or the total amount payable awarded.

*Compensation Accidents Reported in January, 1916, by Injury, Degree, Dependents, and Duration of Disability—
Continued.*

Industries.	Loss of Parts.						Degree.		Number of dependents.	Minors Under 16 Yrs.		Duration of disability in days.	Compensation paid and awarded.
	Eyes.	Arms.	Hands.	Fingers.	Legs.	Feet.	Toes.	Total number of accidents.	Fatal.	Serious.	Male.	Female.	
Building and contracting, ...	...	...	...	...	...	...	...	79	...	79	...	...	\$2,485
Chemicals and allied products, ...	...	...	...	...	...	...	...	30	1	29	...	...	2,462
Clay, glass and stone products, ...	...	...	...	...	...	1	...	97	...	27	...	...	452
Clothing manufacture, ...	...	...	...	...	...	...	...	10	...	9	...	...	388
Food and kindred products, ...	...	...	...	1	...	...	...	35	3	32	...	...	1,024
Leather and rubber products, ...	...	...	...	...	...	...	...	13	...	13	...	...	4,340
Liquors and beverages, ...	...	...	...	...	...	...	...	8	...	8	...	...	303
Lumber and its re-manufacture, ...	...	...	...	3	...	...	...	33	2	31	...	...	241
Printing and printing industries, ...	...	...	...	...	...	...	...	18	...	18	...	...	1,158
Textiles, ...	...	...	...	...	...	...	...	14	1	13	...	...	624
Laundries, ...	...	...	...	...	...	...	...	2	...	2	...	...	396
Metals and metal products, ...	...	...	...	12	...	...	...	590	14	543	...	...	70
Mines and quarries, ...	...	...	...	3	2	...	...	447	47	400	1	...	16,554
Public service, ...	...	...	...	1	...	...	...	74	8	66	...	...	12,470
Tobacco and its products, ...	...	...	...	...	...	...	...	1	...	1	...	...	125,812
Miscellaneous, ...	...	...	...	1	...	...	...	64	3	61	...	...	2,590
Hotels and restaurants, ...	...	...	...	...	...	...	...	9	...	9	...	...	12
Jobbers and wholesalers, ...	...	...	...	...	...	...	...	7	...	7	...	...	2,071
Mercantile establishments, ...	...	...	...	...	...	...	...	17	1	16	...	...	183
Municipalities, ...	...	...	...	...	...	...	...	1	...	1	...	...	271
Totals, ...	...	...	...	21	2	1	...	1,419	81	1,338	...	...	533
Fatal, ...	...	...	...	...	1	...	...	...	...	...	3	...	408
Serious, ...	...	...	...	21	1	1	...	...	...	...	...	...	29
	...	...	...	...	...	...	...	...	...	...	...	...	\$232,182

Compensation Accidents Reported in February, 1916, by Injury, Degree, Dependents and Duration of Disability.

Industries.	Nature of Injury.										Part Injured.							
	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Trunk.	Head and face.	Eyes.	Arms.	Hands.	Fingers.	Legs.	Feet.	Toes.	
Building and contracting, ...	4	17	8	30	2	1	2	21	29	8	1	3	8	9	11	15	1	
Chemicals and allied products, ...	2	2	5	11	.....	1	.....	3	4	1	1	.....	3	5	3	7	.....	
Clay, glass and stone products, ...	3	7	12	10	.....	1	.....	3	7	2	2	.....	4	9	4	6	1	
Clothing manufacture, .....	.....	2	4	4	.....	.....	1	1	1	.....	.....	.....	2	7	1	.....	.....	
Food and kindred products, ...	1	7	4	6	.....	.....	.....	4	3	2	.....	3	3	5	3	3	1	
Fur and leather products, .....	.....	4	8	3	.....	.....	.....	1	6	2	.....	.....	1	10	.....	.....	.....	
Leather and rubber products, ...	2	4	1	4	.....	.....	.....	10	.....	.....	.....	.....	1	2	.....	.....	.....	
Liquors and beverages, .....	.....	7	9	4	.....	.....	.....	9	3	1	.....	.....	1	13	.....	4	1	
Lumber and its re-manufacture, ...	1	8	4	4	.....	.....	.....	4	2	.....	.....	.....	.....	8	2	3	.....	
Printing and printing industries, ...	2	3	7	4	.....	.....	.....	.....	.....	.....	.....	.....	3	2	.....	1	.....	
Textiles, .....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Laundries, ...	78	213	132	99	3	2	4	61	56	31	21	28	61	184	44	111	56	
Metals and metal products, ...	10	174	114	103	1	3	9	77	127	36	20	24	38	101	53	66	26	
Mines and quarries, ...	4	38	21	25	1	1	1	9	30	7	3	4	7	15	12	11	10	
Public service, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Tobacco and its products, ...	1	13	10	16	.....	.....	1	7	9	1	1	4	6	12	8	7	.....	
Miscellaneous, ...	1	1	1	3	.....	.....	.....	1	1	2	.....	1	1	2	.....	1	.....	
Hotels and restaurants, ...	2	5	4	15	.....	.....	.....	3	6	3	.....	4	3	6	2	5	1	
Jobbers and wholesalers, .....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	
Mercantile establishments, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Municipalities, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Totals, ...	111	508	345	346	7	9	18	209	294	96	49	79	144	399	148	246	98	
Fatal, ...	1	30	6	29	7	.....	.....	37	61	32	.....	1	.....	1	7	1	.....	
Serious, ...	110	478	339	317	.....	9	18	172	233	64	49	78	144	398	141	245	98	

The above table includes only cases where compensation has been paid in full, or the total amount payable awarded.

*Compensation Accidents Reported in February, 1916, by Injury, Degree, Dependents, and Duration of Disability—
Continued.*

Industries.	Loss of Parts.						Total number of accidents.	Degree.		Number of dependents.	Minors Under 16 Yrs.		Duration of disability in days.	Compensation paid and awarded.		
	Eyes.	Arms.	Hands.	Fingers.	Legs.	Feet.		Toes.	Fatal.		Serious.					
Building and contracting, ...								85	9	80	92	.....	.....	2,716	\$14,827	
Chemicals and allied products								24	1	23	31	.....	.....	609	1,375	
Clay, glass and stone products, ...								36	1	35	48	.....	.....	977	3,879	
Clothing manufacture, ...								11	.....	11	5	.....	.....	327	163	
Food and kindred products, ...								23	.....	22	25	.....	.....	573	3,607	
Leather and rubber products, ...								16	.....	14	23	.....	.....	418	2,926	
Liquors and beverages, ...								12	.....	12	8	.....	.....	281	150	
Lumber and its re-manufacture, ...								30	.....	29	26	.....	.....	931	4,157	
Printing and printing industries, ...								17	1	16	25	.....	.....	548	1,112	
Textiles, ...								20	.....	20	4	.....	.....	680	436	
Laundries, ...								3	.....	3	6	.....	.....	66	99	
Metals and metal products, ...								592	15	577	603	.....	.....	18,816	42,733	
Mines and quarries, ...								491	63	428	511	.....	.....	12,470	157,715	
Public service, ...								99	9	90	110	.....	.....	2,945	13,510	
Tobacco and its products, ...																
Miscellaneous, ...								48	.....	.....	.....	.....	.....	.....	.....	
Hotels and restaurants, ...								7	1	47	44	.....	.....	1,722	3,890	
Jobbers and wholesalers								6	1	6	5	.....	.....	145	747	
Mercantile establishments, ...								29	1	28	7	.....	.....	147	1,625	
Municipalities, ...								4	.....	4	10	.....	.....	915	2,456	
Totals, ...								1,553	103	1,450	1,584		5	1	45,369	\$255,369
Fatal, ...																
Serious, ...																

Accidents During the Month of February, 1916.

Industries.	Part Injured.														
	Burns and scalds.	Crushes and bruises.	Cuts and lacerations.	Fractures, sprains and dislocations.	Hernia.	Blood poisoning.	Punctures.	Unclassified.	Trunk.	Head and face.	Eyes.	Arms.	Hands.	Fingers.	Legs.
Building and contracting, ...	41	278	204	118	5	10	40	135	150	134	46	37	84	149	85
Chemicals and allied products, ...	161	155	183	85	2	4	21	96	89	95	71	47	84	167	46
Clay, glass and stone products, ...	31	162	289	62	1	4	15	67	71	65	45	23	93	200	44
Clothing manufacture, ...	8	45	30	12	.....	.....	11	31	15	12	8	8	33	90	12
Food and kindred products, ...	25	111	157	57	.....	7	13	68	55	35	8	31	80	127	39
Leather and rubber goods, ...	4	58	91	27	.....	1	7	35	24	15	6	12	29	98	15
Liquors and beverages, ...	4	37	47	12	1	2	1	13	19	11	8	5	23	19	13
Lumber and its re-manufacture, ...	8	81	175	39	.....	6	11	71	34	31	18	7	67	155	24
Paper and printing industries, ...	15	136	138	35	.....	6	12	46	41	27	14	22	60	151	22
Textiles, ...	19	73	143	44	1	9	13	63	36	31	9	22	59	144	21
Laundries, ...	3	8	1	7	.....	1	1	5	4	3	.....	3	3	10	.....
Metals and metal products, ...	938	2,830	3,206	803	10	68	188	1,438	612	712	1,243	369	1,184	3,124	553
Mines and quarries, ...	134	1,840	1,513	584	14	22	135	554	774	548	843	204	545	1,040	593
Public service, ...	110	1,487	637	709	3	8	47	241	579	293	193	131	313	591	407
Tobacco and its products, ...	36	169	197	78	.....	1	1	11	3	1	1	.....	2	4	1
Miscellaneous, ...	9	18	32	22	.....	1	8	110	85	69	46	26	71	176	49
Hotels and restaurants, ...	1	27	12	15	.....	1	1	14	3	9	3	3	20	21	7
Jobbers and wholesalers, ...	14	123	102	73	.....	2	6	21	19	7	3	3	12	14	8
Merchandise establishments, ...	4	15	15	22	.....	.....	20	92	75	46	10	33	56	84	50
Municipalities, .....	.....	.....	.....	.....	1	.....	2	25	20	11	2	4	17	9	9
Totals, ...	1,566	7,661	7,225	2,807	40	158	553	3,126	2,726	2,155	2,072	997	2,841	6,373	1,998

Accidents During the Month of February, 1916—Continued.

Industries.	Part Injured.		Loss of Parts.								Degree and Sex.					
	Feet.	Toes.	Dyes.	Arms.	Hands.	Fingers.	Legs.	Feet.	Toes.	Males.		Females.				
										Fatal.	Serious.	Minor.	Fatal.	Serious.	Minor.	
Building and contracting, ...	119	27	.....	.....	.....	.....	.....	.....	.....	12	67	751	.....	.....	.....	.....
Chemicals and allied products, ...	86	22	.....	.....	.....	.....	.....	.....	.....	5	29	652	.....	.....	.....	.....
Clay, glass and stone products, ...	66	18	.....	.....	.....	.....	.....	.....	.....	5	20	589	.....	.....	.....	.....
Clothing manufacture, ...	13	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Food and kindred products, ...	53	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather and rubber goods, ...	18	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors and beverages, ...	13	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and its re-manufacture, ...	44	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paper and printing industries, ...	38	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Textiles, ...	35	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laundries, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Metals and metal products, ...	1,089	595	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mines and quarries, ...	527	222	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public service, ...	523	212	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco and its products	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous, ...	63	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hotels and restaurants, ...	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jobbers and wholesalers, ...	13	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Merchandise establishments, ...	65	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Municipalities, ...	10	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals, ...	2,789	1,135	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																
																

Accidents During the Month of February, 1916—Continued.

Industries.	Time and Wage Loss.		Total number of accidents.	Days.	Wages.	Number of dependents.	Accidents due to lack of safe guards.	English speaking.	Non-English speaking.	Social Condition.		Minors Under 16 yrs.		Language not given.	Social condition not given.
										Married.	Single.	Males.	Females.		
Building and contracting, ...	6,479	\$16,816 65	677	17	762	30	493	281	1	493	281	1	1	29	57
Chemicals and allied products, ...	3,558	9,876 25	612	11	671	15	390	307	4	390	307	4	4	18	18
Clay, glass and stone products, ...	3,539	8,240 95	627	27	564	49	352	261	9	352	261	9	7	9	14
Clothing manufacture, ...	1,000	2,096 70	88	8	178	2	61	114	2	61	114	2	2	14	19
Food and kindred products, ...	2,697	5,775 00	264	5	406	18	219	200	6	219	200	6	6	8	5
Leather and rubber goods, ...	1,404	3,000 75	203	3	210	1	124	94	2	124	94	2	2	8	5
Liquors and beverages, ...	794	2,155 65	141	2	114	1	86	26	5	86	26	5	5	16	30
Lumber and its re-manufacture, ...	3,016	6,193 65	282	9	370	5	220	141	5	220	141	5	3	11	9
Metal and metal products, ...	1,335	2,928 45	249	12	374	8	182	197	9	182	197	9	3	11	9
Paper and printing industries, ...	1,846	3,133 50	161	7	338	14	152	191	10	152	191	10	5	10	19
Textiles, ...	225	377 00	12	1	26	1	12	14	23	12	14	23	2	223	282
Tanneries, ...	57,145	140,816 00	8,289	336	8,800	458	5,161	4,038	23	5,161	4,038	23	2	3,928	23
Metals and metal products, ...	50,071	118,396 65	3,939	3	843	25	2,947	1,826	21	2,947	1,826	21	21	391	64
Mines and quarries, ...	38,662	102,483 45	3,038	77	2,786	65	2,089	1,089	65	2,089	1,089	65	65	391	1
Public service, ...	80	212 90	15	8	16	2	12	5	6	12	5	6	1	60	27
Tobacco and its products, ...	5,070	11,197 20	457	8	532	9	338	236	6	338	236	6	1	2	3
Miscellaneous, ...	601	1,097 15	61	1	92	3	59	35	3	59	35	3	3	5	4
Hotels and restaurants, ...	84	1,482 75	56	2	79	2	47	33	9	47	33	9	1	32	27
Fish and fish products, ...	3,188	6,149 85	204	2	396	2	191	212	9	191	212	9	1	32	27
Fish and fish products, ...	84	2,136 35	67	.....	84	.....	55	29	.....	55	29	.....	.....	.....	.....
Merchandise establishments, ...	84	2,136 35	67	.....	84	.....	55	29	.....	55	29	.....	.....	.....	.....
Municipalities, ...	182,494	\$444,567 45	19,432	529	17,641	706	13,190	9,329	105	13,190	9,329	105	25	4,789	617
Totals, ...															

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its re-manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
MACHINERY.												
Total, ...	3	6	2	2	6	7	.....	11	10	5	1	96
Rollers—steam pipes (including explosions), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prime movers (engines and motors), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Transmission apparatus, ...	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	14
Working machines, .....	.....	.....	1	.....	.....	1	.....	1	.....	.....	.....	17
Adjusting machine or work, .....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	8
Starting, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Operating and feeding, .....	.....	.....	.....	.....	.....	.....	.....	6	7	1	1	41
Stopping, .....	.....	2	.....	.....	1	6	.....	.....	.....	.....	.....	1
Oiling, .....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Cleaning, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Repairing, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Breaking of machine or work, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
Flying objects, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
All others, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
EXPLOSIVES, ELECTRICITY, FIRES, HOT AND CORROSIVE SUBSTANCES.												
Total, ...	1	4	2	.....	2	.....	2	.....	1	3	.....	52
Corrosive substances, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electricity, .....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Explosives, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Hot substances and flames, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Conflagration, ...	1	2	2	.....	.....	.....	2	.....	1	3	.....	50

Compensation Accidents Reported in January, 1916, by Industry, Cause, Degree and Sex, and Social Condition--
Continued.

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its re-manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
FALLING OBJECTS.												
Total, ...	21	3	8	1	8	1	1	3	1	1	.....	118
Rock and earth, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Collapse of buildings and walls, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collapse of scaffolds and stagings, ...	2	.....	3	.....	1	.....	.....	.....	.....	.....	.....	.....
Collapse of piled-up material, ...	2	1	.....	.....	.....	.....	.....	1	.....	.....	.....	6
Objects dropped by other persons, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Objects falling from trucks or vehicles (not loading or unloading), ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Objects falling from buildings, trestles or scaffolds, ...	1	1	.....	.....	7	1	1	2	1	.....	.....	91
All others, ...	10	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
FALL OF PERSONS.												
Total, ...	18	6	4	3	8	4	1	8	3	1	.....	61
From ladder, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From scaffolds or platforms, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
From vehicles, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
From structures in course of erection, ...	5	2	1	1	1	1	.....	1	.....	.....	.....	1
From structures (all others), .....	.....	.....	.....	.....	4	.....	.....	2	.....	.....	.....	.....
From other elevations, .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8
From excavations, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Into other openings, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
On level, ...	6	4	1	2	2	1	2	4	1	.....	.....	31
All others, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

*Compensation Accidents Reported in January, 1916, by Industry, Cause, Degree and Sex, and Social Condition--
Continued.*

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
Drowning, ...	1	1	1	1	1	1	1	1	1	1	1	2
Intentional violence, ...	1	1	1	1	1	1	1	1	1	1	1	1
All others, ...	1	1	1	1	1	1	1	1	1	1	1	1
Cause not given, ...	1	1	1	1	1	1	1	1	1	1	1	1
Grand total, ...	79	30	27	10	35	13	8	33	18	14	2	530
Fatal, ...	79	1	1	1	3	13	8	2	18	1	1	14
Serious	79	29	27	9	32	13	8	31	18	13	2	516

Continued.

Cause.	Industry.								Degree and Sex.				Total number reported.
	Mines and quarries.	Public service.	Tobacco and its products.	Miscellaneous.	Hotels and restaurants.	Jobbers and wholesalers.	Merchants.	Municipalities.	Male.		Female.		
									Fatal.	Serious.	Fatal.	Serious.	
MACHINERY.													
Total, ...	14	2	.....	5	2	.....	.....	.....	8	158	.....	6	172
Boilers—steam pipes (including explosions), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prime movers (engines and motors), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Transmission apparatus, ...	4	.....	.....	.....	1	.....	.....	.....	2	22	.....	.....	24
Working machines, ...	3	.....	.....	.....	.....	.....	.....	.....	4	20	.....	.....	25
Adjusting machine or work, ...	1	.....	.....	2	.....	.....	.....	.....	1	12	.....	.....	14
Starting, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Operating and feeding, ...	2	1	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	71
Stopping, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	67	.....	.....	.....
Oiling, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
Cleaning, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
Repairing, .....	.....	.....	.....	1	.....	.....	.....	.....	.....	4	.....	.....	.....
Breaking of machine or work, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
Flying objects, ...	1	.....	.....	.....	1	.....	.....	.....	1	2	.....	.....	.....
All others, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	13	.....	.....	.....
EXPLOSIVES, ELECTRICITY, FIRES, HOT AND CORROSIVE SUBSTANCES.													
Total, ...	21	5	.....	.....	.....	.....	.....	.....	8	85	.....	.....	93
Corrosive substances, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electricity, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	3
Explosives, ...	6	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
Hot substances and flames, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....
Conflagration, ...	14	2	.....	.....	.....	.....	.....	.....	4	75	.....	.....	79

HANDLING OF TOOLS AND OBJECTS.

HANDLING OF TOOLS AND OBJECTS.		87	19	1	18	1	6	4	336	1	2	343
Total, ...		87	19	1	18	1	6	4	336	1	2	343
Tools in hands of injured person, ...		12			4							
Tools in hands of fellow workman, ...					1		2		46			47
Handling sharp objects, ...					3		1		7			7
Loading and unloading, ...		14	2	1	3				60		2	62
Carrying and lifting objects not loading or unloading, ...		19	3		6		2	4	47			51
All others, ...		28	9		2	1	1		71	1		106

POWER VEHICLES.

Total,	60	17	2	.....	2	.....	18	86	.....	104
Coupling or uncoupling cars, ...	6	.....	.....	.....	.....	.....	.....	8	.....	8
Defective equipment, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fell from, over or into, ...	9	7	1	.....	.....	.....	10	15	.....	25
Improperly loaded ladies or cars, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Loading or unloading material, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Struck by car or engine, ...	23	1	.....	.....	.....	.....	7	31	.....	2
Struck by overhead or side obstructions, ...	13	7	.....	.....	.....	.....	.....	15	.....	38
Unlocked frogs or guard rails, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
Collisions, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Derailment, .....	.....	1	1	.....	.....	.....	.....	2	.....	2
Not on track, ...	9	.....	.....	.....	.....	.....	1	9	.....	10
On water, .....	.....	1	.....	.....	.....	.....	.....	4	.....	4

STEPPING ON SHARP OBJECTS.

SLEETING ON SHARP OBJECTS.				
Total,	2	1	1	12
Nails,	1	1	1	8
All others,	1	1	1	4

RUNNING INTO OR STRIKING AGAINST OBJECTS.

11	5	3	2	1	39	3	42
Total, ...	11	5	3	2	1	39	3
OBJECTS.							

POISONOUS SUBSTANCES.

POISONOUS SUBSTANCES.
.....
Total, ...

MISCELLANEOUS.

MISCELLANEOUS.						
Total,	8	3	2	1	7	92
Flying objects—not from machines, tools or explosives, ...	38	—	—	—	—	—
Animals, ...	22	3	—	—	—	60
Doors, windows and gates, exclusive of elevator gate ^a , ...	12	—	—	—	1	29
Asphyxiation and suffocation, ...	2	—	2	—	—	3
Lightning, ...	2	—	—	—	2	2
Hearst prostrations, ...	—	—	—	—	—	—
Frost bites, ...	—	—	—	1	1	1
Heat prostrations, ...	—	—	—	—	—	—
Bites, ...	—	—	—	—	—	—
TOTAL MISCELLANEOUS, ...	54	3	2	1	7	85

Continued.

Cause.	Industry.								Degree and Sex.		Total number reported.
	Mines and quarries.	Public service.	Tobacco and its products.	Miscellaneous.	Hotels and restaurants.	Jobbers and wholesalers.	Merchants and establishments.	Municipalities.	Sex.		
									Male.	Female.	
Drowning, ...	2	2	2	2	2	2	2	2	2	2	2
Intentional violence, ...	2	2	2	2	2	2	2	2	2	2	2
All others, ...	2	2	2	2	2	2	2	2	2	2	2
Cause not given, ...	2	2	2	2	2	2	2	2	2	2	2
Grand total.	447	74	1	64	9	7	17	1	1,320	18	1,419
Fatal, ...	47	8	1	3	9	7	1	1	1	1	18
Serious, ...	400	66	1	61	1	1	16	1	1,320	18	1,338

Compensation Accidents Reported in February, 1916, by Industry, Cause, Degree and Sex, and Social Condition.

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its re-manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
MACHINERY.												
Total, ...	4	.....	3	6	5	8	2	7	5	10	1	9
Boilers—steam pipes (including explosions), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prime movers (engines and motors), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Transmission apparatus, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
Working machines, ...	1	.....	.....	.....	1	2	.....	.....	.....	1	.....	17
Adjusting machine or work, .....	.....	.....	.....	2	.....	.....	.....	1	1	2	.....	8
Starting, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Operating and feeding, .....	.....	.....	1	4	3	6	.....	6	2	1	1	3
Stopping, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oiling, .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Cleaning, ...	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Repairing, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Breaking of machine or work, ...	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
Flying objects, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
All others, .....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
EXPLOSIVES, ELECTRICITY, FIRES, HOT AND CORROSIVE SUBSTANCES.												
Total, ...	4	4	3	.....	2	.....	1	.....	1	2	.....	70
Corrosive substances, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electricity, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Explosives, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hot substances, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hot substances and flames, ...	4	2	3	.....	2	.....	1	.....	1	2	.....	69
Conflagration, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Compensation Accidents Reported in February, 1916, by Industry, Cause, Degree and Sex, and Social Condition—
Continued.

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its re-manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
FALLING OBJECTS.												
Total, ...	17	2	5	.....	2	1	2	3	2	1	2	129
Rock and earth, .....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	4
Collapse of buildings and walls, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collapse of scaffolds and stagings, ...	4	.....	1	.....	.....	.....	.....	.....	.....	.....	1	6
Collapse of piled-up material, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Objects dropped by other persons, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Objects falling from trucks or vehicles (not loading or unloading), .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	5
Objects falling from buildings, trestles or scaffolds, ...	10	2	2	.....	2	1	2	2	2	1	1	103
All others, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
FALL OF PERSONS.												
Total, ...	28	8	6	3	5	2	4	6	1	2	.....	52
From ladder, .....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	6
From scaffolds or platforms, ...	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
From vehicles, ...	1	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....
From structures in course of erection, ...	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
From structures (all others), .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	7
From other elevations, ...	3	.....	2	.....	.....	.....	.....	1	.....	.....	.....	1
From excavations, .....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	7
Into other openings, ...	3	2	2	2	.....	1	4	3	1	1	.....	28
On level, ...	9	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
All others, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

HANDLING OF TOOLS AND OBJECTS.

[illegible]

POWER VEHICLES.

LOWER VEHICLES.					
Total,	4	2	1	1	21
Coupling or uncoupling cars, ...					
Defective equipment, ...					3
Fall from, over or into, ...	1	1			6
Improperly loaded ladles or cars, ...					2
Loading or unloading material, ...		1			7
Struck by car or engine, ...	1			1	1
Struck by overhead or side obstructions, ...	1				1
Unlocked frogs or guard rails, ...					1
Collisions, ...			1		1
Derailment and replacing cars, ...					1
Not on track, ...	1				1
On water, ...					1

STEPPING ON SHARP OBJECTS.

SLEEPING ON SHARP OBJECTS.			
Total,	2	1	2
Nails,			
All others,			
Total,			

RUNNING INTO OR STRIKING AGAINST OBJECTS.

[illegible]

POISONOUS SUBSTANCES.

[illegible]

MISCELLANEOUS.

[illegible]

*Compensation Accidents Reported in February, 1916, by Industry, Cause, Degree and Sex, and Social Condition—
Continued.*

Cause.	Industry.											
	Building and contracting.	Chemicals and allied products.	Clay, glass and stone products.	Clothing manufacture.	Food and kindred products.	Leather and rubber goods.	Liquors and beverages.	Lumber and its manufacture.	Paper and printing industries.	Textiles.	Laundries.	Metals and metal products.
Drowning, ...	1	1	1	1	1	1	1	1	1	1	1	4
Intentional violence, ...	1	1	1	1	1	1	1	1	1	1	1	1
All others, ...	1	1	1	1	1	1	1	1	1	1	1	1
Cause not given, ...	85	24	36	12	23	16	12	30	17	20	3	592
Grand total, ...	86	25	37	13	24	17	13	31	18	21	4	593
Fatal, ...	5	1	1	1	1	2	1	1	1	1	1	15
Serious, ...	80	23	35	12	22	14	12	29	16	20	3	577

*Compensation Accidents Reported in February, 1916, by Industry, Cause, Degree and Sex, and Social Condition—
Continued.*

Cause.	Industry.								Degree and Sex.				Total number reported.
	Mines and quarries.	Public service.	Tobacco and its products.	Miscellaneous.	Hotels and restaurants.	Jobbers and wholesalers.	Merchandise establishments.	Municipalities.	Male.		Female.		
									Fatal.	Serious.	Fatal.	Serious.	
MACHINERY.													
Total, ...	21	6	.....	7	.....	2	6	.....	9	107	.....	10	186
Boilers—steam pipes (including explosions), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Prime movers (engines and motors), .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Transmission apparatus, ...	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Working machines, ...	6	1	.....	2	.....	1	.....	.....	7	23	.....	1	23
Adjusting machine or work, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	.....	.....	31
Starting, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	14
Operating and feeding, ...	7	3	.....	3	.....	.....	.....	.....	.....	76	.....	8	84
Stopping, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oiling, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleaning, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	5
Repairing, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	4
Breaking of machine or work, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flying objects, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	3
All others, .....	.....	2	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	3
EXPLOSIVES, ELECTRICITY, FIRES, HOT AND CORROSIVE SUBSTANCES.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, ...	33	4	.....	1	1	.....	2	.....	22	104	.....	2	128
Corrosive substances, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electricity, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	3
Explosives, ...	4	1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	6
Hot substances and flames, ...	21	.....	.....	.....	.....	.....	.....	.....	.....	19	.....	.....	22
Conflagration, ...	6	3	.....	1	1	.....	.....	.....	.....	94	.....	2	97

HANDLING OF TOOLS AND OBJECTS.

Total, ...	93	24	.....	14	2	1	4	1	2	349	.....	S	359
Tools in hands of injured person, ...	13	3	.....	5	.....	.....	.....	.....	.....	44	.....	2	46
Tools in hands of fellow workman, ...	1	1	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	5
Handling sharp objects, ...	12	3	.....	.....	2	.....	.....	.....	.....	56	.....	4	60
Loading and unloading, ...	9	6	.....	5	.....	1	1	.....	1	57	.....	1	59
Carrying and lifting objects not loading or unloading	22	3	.....	3	.....	.....	.....	.....	.....	65	.....	.....	65
All others, ...	36	8	.....	1	.....	.....	3	1	1	122	.....	1	124
POWER VEHICLES.													
Total, ...	80	17	.....	2	.....	.....	3	.....	21	111	.....	.....	132
Coupling or uncoupling cars, ...	5	1	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	9
Defective equipment, ...	9	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	22
Fall from, over or into, .....	.....	1	.....	.....	.....	.....	.....	.....	4	18	.....	.....	1
Improperly loaded ladles or cars, .....	.....	1	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	5
Loading or unloading material, ...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Struck by car or engine, ...	23	6	.....	12	.....	.....	1	.....	12	34	.....	.....	46
Struck by overhead or side obstructions, ...	16	.....	.....	.....	.....	.....	.....	.....	2	16	.....	.....	18
Unlocked frogs or guard rails, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collisions, ...	3	.....	.....	.....	.....	.....	.....	.....	2	4	.....	.....	6
Derailment and replacing cars, ...	18	1	.....	1	.....	.....	1	.....	1	20	.....	.....	21
Not on track, ...	1	1	.....	1	.....	.....	.....	.....	.....	4	.....	.....	4
On water, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
STEPPING ON SHARP OBJECTS.													
Total, ...	4	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	.....	9
Nails, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	4
All others, ...	2	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	5
RUNNING INTO OR STRIKING AGAINST OBJECTS.													
Total, ...	13	3	.....	3	.....	.....	.....	.....	.....	53	.....	2	55
POISONOUS SUBSTANCES.													
Total, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
MISCELLANEOUS.													
Total, ...	42	6	.....	2	.....	1	2	.....	8	108	.....	1	117
Flying objects—not from machines, tools or explosives, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Animals, ...	25	6	.....	1	.....	.....	.....	.....	5	67	.....	.....	72
Doors, windows and gates, exclusive of elevator gate	11	.....	.....	.....	.....	1	1	.....	1	18	.....	.....	19
Asphyxiation and suffocation, ...	1	1	.....	.....	.....	.....	.....	.....	.....	7	.....	.....	7
Lightning, .....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	2
Heat prostrations, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frost bites, ...	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1

Continued.

Cause.	Industry.										Degree and Sex.		Total number reported.
	Mines and quarries.	Public service.	Tobacco and its products.	Miscellaneous.	Hotels and restaurants.	Jobbers and wholesalers.	Merchants and establishments.	Municipalities.	Male.		Female.		
									Fatal.	Serious.	Fatal.	Serious.	
Drowning, ...	1	1	1	1	1	1	1	1	1	1	1	1	1
Intentional violence, ...	2	1	1	1	1	1	1	1	1	1	1	1	1
All others, ...	1	1	1	1	1	1	1	1	1	1	1	1	1
Cause not given, ...	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand total, ...	401	99	48	47	7	6	29	4	103	1,418	32	1,553	1,553
Fatal, ...	63	9	1	1	1	1	1	1	1	1	1	1	1
Serious, ...	428	90	47	47	6	5	28	4	102	1,417	31	1,552	1,552

BULLETIN NO. 3

RULES AND RULINGS

OF THE

Pennsylvania Workmen's Compensation Board

ISSUED BY THE

WORKMEN'S COMPENSATION BUREAU

OF THE

Department of Labor and Industry
Harrisburg, Pennsylvania

THE WORKMEN'S COMPENSATION BOARD

HARRY A. MACKEY, Chairman
JAMES W. LEECH
JOHN A. SCOTT
JOHN PRICE JACKSON, ex officio

LEE SOLOMON, Secretary.

FRANCIS SHUNK BROWN, Attorney General
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CHARLES H. YOUNG, Associate Counsel
SAMUEL I. SPYKER, Associate Counsel.



RULES AND INSTRUCTIONS FOR THE EXECUTION OF COMPENSATION AGREEMENTS.

I. Agreements for Disability.

No agreement is necessary unless the disability resulting from the accident lasts more than fourteen days or the employer has failed to provide the surgical, medical, and hospital services required by Section 306(e) and has thus compelled the injured employe to obtain them at his own expense.

In computing the time when the disability becomes compensable, the day upon which the accident occurs is to be considered one of the fourteen days. Thus, if an accident occurs at any hour on January 1, the right to compensation begins on January 15.

Compensation Agreements, as provided in Section 411, must be executed (substantially as provided in Form W 14) whenever the disability continues for more than fourteen days. No receipt for compensation from an employe will be approved as a discharge of the liability created by Article III, unless such an agreement has been mailed or delivered to the Board and approved by it.

When after the first fourteen days of disability, there appears a reasonable prospect that the disability will terminate within a further period of fourteen days, no agreement need be executed until the disability has terminated or the further period of fourteen days has expired. An agreement showing that the disability has terminated together with the receipt (substantially as provided in Form W 51), showing that the agreed compensation has been paid, will close the case, subject however to its being re-opened by a new agreement or award, if at some later time an unexpected return of disability should result from the injury.

When the accident has caused the loss of a hand, foot, arm, leg or eye or the use thereof, an agreement should be made, immediately after the expiration of the first fourteen days, for the payment of compensation for the number of weeks appropriate to the particular dismemberment under Section 306(c).

When the disability is one of uncertain duration, an agreement should be made not more than four weeks after the disability begins. This agreement must fix the compensation to be paid for disability up to the date thereof. The future compensation may be provided for in one of three ways:

First: A new agreement may be made on each succeeding pay day providing for the compensation then due.

Second: The agreement may provide for the payment of compensation for a further definite period during which it is estimated that such disability is certain to continue.

Third: It may provide that compensation shall be paid during the full 500 weeks, when the disability is total, or 300 weeks, when it is partial, "or so long as the disability continues unchanged."

While the first two methods may be used with advantage when there is a reasonable prospect of a speedy recovery of earning power, they are inappropriate if the disability appears likely to last any considerable time, since they would require the constant execution of supplemental agreements. In such case, the third method is strongly recommended.

When an agreement has been executed or an award made providing for or ordering payment of compensation "so long as the disability continues unchanged," a supplemental agreement, (substantially as provided in Form W 14 a), modifying the agreement or award, should be executed, if the employee's disability changes from total to partial, by his regaining his ability to work, though at a reduced earning power, or from partial to total, where an injury, which had originally reduced his earning power, increases so as to completely destroy it. If the employee recovers from his injury so as to regain his full earning power, which is generally shown by his return to work at his original wages, a supplemental agreement (substantially as provided in Form W 14 a) may be executed or a final receipt (substantially as provided in form W51 b), setting forth the manner in which and the date on which the employee's disability terminated and signed by him in the presence of an attesting witness, may be filed with the Workmen's Compensation Bureau at Harrisburg.

If the employee or his dependents, in case of his death, refuse to execute such a supplemental agreement or sign such a final receipt, when his disability has diminished or ceased, or if the employer should refuse to execute such an agreement when the employee's disability has increased, a petition can be presented to the Board under Section 426, (substantially as provided in Form W 35) praying it to order the agreement or award modified or terminated. And the filing of such a petition will suspend, until the petition be granted or refused, the payment of compensation to such an extent as the facts alleged therein would, if proved, require.

If any employee, entitled to compensation for disability under an agreement or award, dies as a result of his injury, an agreement (substantially as provided in Form W 15) should be immediately made

with the dependent, dependents or personal representative of such employe. Such an agreement, stating, as it must, the date of the employe's death, will of its own force and without any further agreement, terminate the disability agreement as of the date of such death.

II. Agreements for Death Compensation.

When the accident causes death, without any intervening period during which disability compensation is payable to the employe an agreement (substantially as provided in Form W 15) should be executed between the employer and the dependent, dependents or personal representative.

In many cases the amount of the death compensation will not vary during the period in which it is payable, unless one or more of the dependents die or remarry. Thus if the deceased employe leaves only a widow or a widow and children, all under ten years of age, she will be entitled to the same percentage of her husband's wages from the beginning to the end of the three hundred weeks during which death compensation is payable, unless she remarry or she, or one or more of her children, die.

On the other hand, there will be many cases when the percentage of wages payable as death compensation is certain to diminish from time to time, as the children arrive at the age of 16. Thus, if a widow be left with four children aged respectively 11, 12½, 14 and 15½ years, she will be entitled to 60% of her deceased husband's wages for the first six months, to 55% for the next eighteen months, to 50% for the next eighteen months, to 45% for the next eighteen months and finally to only 40% for the last forty weeks of the full compensation period of three hundred weeks. The last paragraph of the Compensation Agreement for Death prepared by the Board (Form W 15) is designed for use in such a case. By using it, the varying compensation, payable under these changing conditions, can be agreed upon in one agreement thus saving the annoyance and inconvenience of making a new agreement every time a child, brother or sister reaches the age of sixteen. In all cases where there are children under sixteen years of age, the agreement should be made to cover the compensation due such children until they reach the age of sixteen.

Wherever the liability of an employer for death compensation under an agreement or award has been terminated by the remarriage of a widow, there being no child entitled to compensation, or by the death of all the dependents, a supplemental agreement (substantially as provided in Form W 15a) terminating the compensation agreement or the award may be executed or a receipt (substantially as provided in Form W 51c) setting forth the manner in which and the date on

which the dependency of the person or persons entitled ceased and signed by the widow, guardian of the dependent child or children, or brother or sister or by the personal representative of the father or mother, in the presence of an attesting witness, may be filed with the Workmen's Compensation Bureau at Harrisburg.

Where the marriage of a widow or the death of a dependent changes the amount of compensation or the person or persons to whom it is payable, but does not entirely extinguish the employer's liability under an award or agreement, a supplemental agreement (substantially as in Form W 15a) should be executed.

If the widow upon remarriage, or the personal representative of a deceased person, who was the only dependent, or the remaining dependents, where there were several dependents, shall refuse to execute such a supplemental agreement or sign such a receipt as the facts require, a petition may be presented to the Board under Section 426 (substantially as provided in Form W 36) praying it to modify or terminate the Compensation Agreement or Award, and the filing of such a petition will, until the petition be granted or refused, suspend the payment of compensation to such an extent as the facts alleged therein would, if proved, require.

RULES FOR ASCERTAINING WAGES.

Wages is the amount in money value agreed upon in the contract of employment, written or oral, in force at the time of the accident, to be paid to the employe for his services.

In determining the money value of wages,

1. Do not add to the amount agreed upon in the contract—
 - (a) Gratuities to the employe, such as tips or presents.
 - (b) Wages paid for overtime, except in seasonal employments, or employments dependent on the weather.
 - (c) Board, lodging, rent, fuel or similar advantages from the employer, unless the money value of such advantages shall have been fixed as part of the wages by the parties at the time of the hiring.
2. Do not deduct from the amount agreed upon in the contract—
 - (a) The value of materials, supplies, tools and other things necessary for the performance of the employe's contract with his employer, furnished or paid for by the employer, unless the contract shall

specifically provide that the employer shall furnish them, and that the employer shall deduct the value thereof from the employee's gross earnings.

If the contract of employment be in writing, such provision must be specifically included therein. If the contract be oral, the burden is upon the employer to show that the employee received express notice that the contract contained this provision.

Unless the value of materials, etc., is fixed in the contract of employment, the amount to be deducted under a contract providing for such deduction shall be the fair market value of such materials, etc.

(b) Sums due the employer for rent or supplies other than those necessary for the employee's use in the performance of his labor, even though supplied by the employer under a contract which gives him the right to deduct such sums from the wages from time to time due the employee.

When the wages at the time of the accident are fixed by the week, the weekly wage so fixed shall be the basis for computing compensation.

When the wages are fixed on a monthly basis, ascertain the weekly wages by multiplying the monthly salary or wages by 12 and dividing by 52.

When the wages are fixed by the year, divide the yearly wage by 52.

To find "Average Daily Wage" in Continuous Employment:

1. Take total earning for six months preceding the accident, or so much thereof as employee has worked for the same employer.

2. Subtract from said "Total Earnings" all earnings for overtime, if any.

3. Divide remainder thus obtained by number of "Working Days."

4. For "Average Weekly Wage" multiply above result by five and one-half.

NOTE: "Working Days" shall be construed to mean total number of days in the period of employment covered, according to the calendar, less:

(a) Sundays

(b) Legal Holidays

(c) Half holiday for each week

(d) Days employee was prevented from working through no fault of his own.

5. When the employment is continuous and substantially constant and regular, the employee's earnings for the last full week preceding the accident may be taken as the average weekly earnings.

Compensation for Fraction of a Week.

When at the termination of the disability compensation is payable for a fraction of a week, the employee shall receive for each day of such fraction of a week, including Sundays and holidays, one-sixth of his weekly compensation.

RULES OF PROCEDURE.

1. All Agreements, Petitions and Answers must be substantially in accordance with the forms prepared by the Board.

2. If the facts agreed upon in a Compensation Agreement differ materially from the facts stated in the Report of the Accident and the reports supplemental thereto made to the Department of Labor and Industry, the Agreement will not be approved until the discrepancy is explained to the satisfaction of the Board.

3. Any Claim Petition, which does not contain the information required by Forms W 18 and W 19, will not be assigned to a Referee for hearing, but will be returned to the claimant in order that he may supply the information not given.

Petitions and Answers.

1. Petitions which allege facts as the ground for the relief prayed for and all answers to Petitions must be signed and supported by oath or affirmation.

2. When a petition to the Board alleges facts as the ground for the relief prayed for therein, the adverse party must file an answer (substantially in accordance with Forms W 38, W 39, W 40) and any fact alleged in the petition, which is not denied by the answer, will be deemed to be admitted.

3. Compensation Referees shall administer oaths free of charge and shall, when requested to do so, assist all parties in drawing claim petitions, answers and all other papers necessary for the administration of the Workmen's Compensation Act.

Amendment of Pleadings.

1. A claim petition or answer thereto may be amended before the award of the Referee and any petition, answer, appeal, or other pleading to the Board may be amended before action by the Board by written agreement filed with the Referee at his office, or with the Secretary of the Board at its principal office at Harrisburg, or by a petition to the Board filed with the Secretary of the Board as aforesaid.
2. A copy of such petition to the Board must be served by registered mail upon each adverse party or his counsel. The petition must set forth under affidavit the original pleading, the amended pleading desired, the reasons why the amendment is desired, such facts as are alleged as ground for amendment and the date of mailing the copy of the petition to each adverse party.
3. Any adverse party may, within five days after the copy of the petition is mailed to him, file an answer under affidavit denying any fact alleged in the petition and giving any other reason why the amendment prayed therein should not be granted.
4. The petition will be disposed of by the Board without argument.
5. Any issue of fact raised by a petition for amendment and answer thereto may be heard by the Board or referred to any Referee, whose finding therein shall be final.

PROCEEDINGS BEFORE REFEREES.

Duties of a Referee Before a Hearing.

1. When a Claim Petition is assigned to a Referee, he should endeavor to bring the parties to an understanding and to induce them to settle the claim, without further litigation, by an appropriate Compensation Agreement.
2. The Referee shall continue the hearing and make an investigation either in person or through an Inspector of the Department of Labor and Industry, when in his judgment such an investigation is necessary to determine any question of fact raised by the pleadings or testimony or when there is a discrepancy between the facts set forth in the Claim Petition and those stated in the Report of the Accident made to the Department of Labor and Industry.

3. Where any medical fact is put in issue by a petition and answer the Referee shall apply to the Board, as provided in Section 417, for power to appoint an impartial physician or physicians to examine the physical condition of the petitioner or defendant to the petition and report thereon.

4. When a Claim Petition has been assigned to a Referee and the only fact denied in the answer is one which can be more conveniently investigated in another compensation district, the petition may be assigned through the bureau to the Referee of such other district.

5. When one of the allegations denied in an answer to a Claim Petition is the disability of an employe or the status of a dependent, this question may be referred through the Bureau by the Referee to whom the petition is assigned, to the Referee of any district in which the question can be more conveniently investigated, whose finding thereon when made to the original Referee shall be of the same effect as a finding of the original Referee.

6. When it comes to the notice of any Referee to whom a claim petition has been assigned whether before, at, or after hearing held thereon, that the State Workmen's Insurance Fund is the insurance carrier of the employer defendant, the Referee shall stay all proceedings and continue any hearing set or held and shall immediately notify the State Workmen's Insurance Fund at its principal office at Harrisburg.

Upon receipt of a notification from the State Fund that the employer against whom the petition has been filed has notified the Fund of the accident, as required by Section 20 of the Act creating the State Fund, the Referee shall amend the record in the case so as to make the State Fund the defendant instead of the employer. When the Referee files his award or disallowance with the Bureau he shall notify the Bureau that he has amended the record as aforesaid, so as to enable the Bureau to amend its record accordingly.

9. When any counsel, insurance carrier or representative of any party in interest shall have filed his appearance in writing the Referee shall serve all notices and other papers upon him, and not upon the party whom he represents, and shall return the appearance as part of the record to the Bureau with his award or disallowance of compensation.

Hearings.

1. The Referee shall hold each hearing at the place, within his district, most convenient to all parties concerned.

2. All hearings before the Board or a Referee shall be open to the public.

3. The Referee shall cause the testimony produced at the hearing to be taken stenographically. Whenever the question of the admissibility of testimony is presented for the consideration of the Referee he shall promptly rule upon the same and note an exception to either party requesting it.

4. The Referee shall require that both parties and counsel shall treat all witnesses fairly and courteously.

5. When either a claimant or defendant is not represented by counsel, the Referee shall advise him as to his rights, aid him in examining witnesses and give him all assistance which is compatible with the judicial position of the Referee.

Hearings Where no Answer is Filed.

If the defendant shall fail to file an answer within seven days after notice and copy of the petition has been served upon him, the Referee shall fix a hearing not less than twelve days nor more than twenty-one days after notice of the filing of the petition shall have been mailed, or delivered to all adverse parties thereto. At such hearing no evidence shall be heard on behalf of the defendant to deny, add to or vary, the facts alleged in the petition, but the defendant may deny that compensation is payable under the facts alleged in the petition.

If the petition alleges sufficient facts to enable the Referee to make an award thereon, without the proof of further facts, the Referee shall fix a hearing at his office and shall notify the claimant that he need not attend the hearing, in which case, if the Referee after hearing the defendant believes that the right to compensation is doubtful, he shall notify the claimant that unless he shall present argument in support of the petition, the Referee will disallow the claim. If the claimant shall within five days after the notice has been served upon him, notify the Referee of his desire to present argument, the Referee shall fix the hearing at a time and place convenient to all parties as provided in Section 415.

If the petition does not aver sufficient facts to enable the Referee to make an award thereon the Referee shall fix the hearing at a time and place convenient to all parties, as provided in Section 415, at which time evidence shall be heard on both sides only upon such facts not alleged in the petition as are necessary to enable him to make an award.

In all cases when the defendant shall fail to file an answer the Referee shall have the same power to make an investigation in person or by physicians or experts as though an answer had been filed.

Procedure, When Either Party Fails to Appear at a Hearing.

Where a claimant fails to appear at a hearing set by a Referee of which he or his counsel of record has received timely notice and does not file with the Referee before or at the hearing a legal excuse for his nonappearance, the Referee shall dismiss the petition without prejudice to the right of the claimant to file a second petition at any time within the period of limitation fixed by Section 315.

If a second petition is filed, it will not be assigned to any Referee until the claimant has satisfied the Board that he has paid the costs incurred in the first proceedings as taxed by the Referee.

If a defendant shall fail to appear at a hearing set by a Referee, of which such defendant or his insurance carrier or counsel of record has had timely notice, the Referee shall proceed with the hearing.

Burden of Proof.

1. The party, who alleges in his petition or answer any fact, not admitted by the pleadings and not ascertained by an investigation made or ordered by the Referee, must produce evidence to prove it.

2. The burden rests upon the claimant or petitioner to establish by a preponderance of probability, upon all the facts proved by the evidence or ascertained by the Referee's investigation, his right to compensation and the amount thereof or his right to such other relief as his petition prays for.

Evidence.

1. When its admission may lead to the discovery of substantial evidence, hearsay evidence may be received in any hearing where the person whose statements are sought to be introduced is dead or his deposition cannot be conveniently obtained, provided the circumstances under which they were made are such as to convince the Referee or Board that they are trustworthy.

2. Any conduct or act which shows a fixed habit, or reasonably constant tendency, on the part of any person to act or not to act in a particular way, shall be admitted in evidence to prove that such an act was or was not done by such person on the occasion in question.

3. No physician's certificate shall be admitted as evidence of any controverted medical fact, unless such physician be dead or otherwise unable to testify before the Referee of any district of this Commonwealth or to make a deposition.
4. If a witness resides in a district, other than that to which the Claim Petition is assigned or the question of fact referred, the Referee may order his or her testimony to be taken before the Referee of the District in which the witness resides.
5. No deposition shall be admitted, except by express agreement of the parties, unless the witness resides outside the Commonwealth or it is shown that by reason of illness or other cause, the witness can not give his or her testimony before the Referee of any district of this Commonwealth.
6. If the Referee has made a personal investigation he shall state at the hearing any facts, observed by him, upon which he intends to rely and he shall, if requested by either party, grant a continuance to enable such party to produce evidence to challenge the accuracy of his observation.
7. If a Referee intends to rely upon any statement made to him during a personal investigation, he shall state at the hearing the substance of the statement and the name of his informant, and shall offer to continue the hearing in order that his informant may, if either party so request, be produced as a witness for examination and cross-examination. The failure to request such continuance shall be a waiver of all right to the production, examination and cross-examination of such informant.
8. Whenever the Referee intends to rely upon the report of any physician, or of any inspector of the Department of Labor and Industry, or any other expert, appointed or employed by him under Section 417, he shall, whenever possible, offer to the parties an opportunity to read such report, or, if this be impossible, shall notify them that he intends to consider the report of such physician, inspector or expert, giving the name of the physician, inspector or expert and the matter entrusted to him for investigation and notifying the parties that he will admit such report in evidence without requiring the physician, inspector, or expert to attend the hearing, unless either party shall make a request in writing that such physician or expert be produced at the hearing for examination or cross-examination. The failure to request the production of such physician, inspector, or expert shall be a waiver of any right of examination and cross examination.

COSTS.

Costs incurred by a party will not be included in an award unless the party shall, within three days after final hearing, file with the Referee or with the Secretary of the Workmen's Compensation Board, if the case is heard de novo by the Board, an itemized statement of the costs, giving the names of witnesses, days of actual attendance, mileage, service of subpoena, and shall verify the same by affidavit that the witnesses named were material and in actual attendance at the time specified and shall serve a copy thereof by mail upon the adverse party or his counsel.

The adverse party may within three days after such copy has been served upon him file exceptions thereto with the Referee or with the Secretary of the Board, as the case may be, and the Referee or Board shall fix a time and place for hearing the same.

The Referee or Board, as the case may be, shall tax the costs incurred by the parties as shown by the itemized statement filed by them and shall place such costs as are allowed by him together with those incurred by the Referee, upon the unsuccessful party, unless the special circumstances of the case make it proper to otherwise dispose of them. In such case he may put upon each party the costs incurred by him or he may divide the costs in such proportion as he shall deem proper. If the Referee shall dispose of the costs otherwise than by imposing them upon the unsuccessful party, he shall set forth fully in his award his reasons for so doing.

The costs of the hearing shall be paid to the Referee or Secretary and shall be paid over by him to the parties entitled thereto, unless the party on whose behalf the costs have been incurred shall present receipts from the parties entitled thereto, in which case the costs so paid by the party shall be paid to him.

Referee's Award.

The Referee's Award or Disallowance of Compensation shall be made upon Form W 24, in the following order:

1. Title of case and number of claim petition.
2. Date and place of hearing.
3. Name and address of parties, insurance carrier, counsel, and witnesses.
4. A brief statement of material testimony.
5. Findings of fact.
6. Conclusions of law.

7. Award, citing section and clause of the Act upon which the award is based, or giving in full reasons for disallowing compensation.

8. Disposition of costs.

PETITIONS TO THE BOARD.

Petition for Determination of Compensation Due Under Agreed Facts.

(Forms W 30 and W 31)

Petitions to the Board praying for the determination of compensation due under facts agreed upon by the parties shall state whether the parties desire the case to be determined:

- (a) Without argument,
- (b) On briefs submitted, or
- (c) On oral or written argument in person or by counsel.

Petitions for Commutation.

(Forms W 33 and 34)

All petitions for commutation must be heard by the Board or some member thereof, even though the defendant does not oppose the commutation or both join in with the petition requesting it. The petitioner must appear in person or by Counsel, unless the petitioner's need is urgent, or illness or other sufficient cause prevents his appearance. In every case a full and detailed statement of the circumstances which are alleged to require the commutation must be set forth in the petition duly sworn to and filed with the Board.

Petitions for Review of Agreements or for the Termination or Modification of Agreements or Awards.

(Forms W 35 and 37)

All petitions for the review of an agreement or for the termination or modification of an agreement or award will be disposed of as follows:

1. If no answer is filed within seven days after the notice of the petition has been served on all adverse parties, the Board will dispose of the matter upon the facts alleged in the petition.

2. When an answer is filed the Board will refer the petition and answer to the Referee of the district in which the matter can be most conveniently investigated.

3. Where a question of fact arises under a petition and answer as to a change in the disability of an employe or the status of a dependent, it will be referred to the Referee of the district in which the employe or dependent resides or resided.

4. The Referee shall fix a time and place of hearing and shall notify all parties thereof and shall hear and determine the matter, and return his findings to the Bureau in the same manner and with the same powers as in the case of a claim petition.

5. A party against whom the Referee has made a finding may appeal to the Board on the same grounds and in the same manner as in the case of an appeal from a Referee's award or disallowance of compensation.

6. The filing of a petition to terminate or modify a Compensation Agreement or Award, as provided in Section 426, will operate as a supersedeas and will suspend the payment of compensation fixed in the Agreement or by the Award, in whole or in such part as the facts alleged in the petition would, if proved, require.

APPEALS FROM REFEREES.

1. When an appeal is taken from the decision of a Referee on questions of fact or law, the appellant must set forth specifically and fully the errors of which he complains, and shall specify whether he desires the case to be heard:

- (a) Without argument,
- (b) On briefs submitted, or
- (c) On oral argument in person or by counsel.

2. Appeals shall be heard without the appearance of the parties in person or by counsel unless the appellant shall at the time of filing his appeal notify the Board that he desires to appear in person or by counsel, or the appellee shall within five days after notice of the appeal has been served upon him notify the Board that he desires to appear in person or by counsel.

3. If neither party has notified the Board of his desire to appear in person or by counsel, the Board will consider the appeal at the next meeting or sitting held by it after the expiration of ten days from the date of service of notice of appeal upon the appellee.

4. The appellant or appellee may file a written brief at or prior to the time his appeal is heard. All briefs shall be filed in triplicate.

5. An appeal taken by the State Workmen's Insurance Fund or by an employer, who has complied with Section 305, will operate as a supersedeas and will suspend the payments ordered by the Award appealed from, in whole or in such part as the appeal, if sustained, would require. An appeal by an employer who has not complied with Section 305 will not operate as a supersedeas, unless such employer shall file a satisfactory bond in an amount sufficient to secure the payment of the compensation, due under the award at the date of the appeal and the compensation which may accrue during the pendency of the appeal.

6. Whenever the Referee shall receive notice from the Bureau that an appeal has been filed with the Board from his decision in any case, he shall immediately cause the notes of testimony taken in that case to be typewritten and forward to the Board four copies, with the certificate of the official stenographer that they are full and correct.

APPEALS FROM DECISIONS OF BOARD.

Rules Governing the Same.

The Board of Judges of Philadelphia County on June 30, 1916 adopted rules governing appeals from the decisions of the Compensation Board. These rules are recommended by the Board to the favorable consideration of all the Common Pleas Courts of the State with the suggestion that their adoption will secure uniformity of practice. The rules follow:

APPEALS.

20½. The notice of appeals from the decisions of the Workmen's Compensation Board to be filed with the Prothonotary shall be in the following form:

In the Court of Common Pleas No. ... of the County of Philadelphia.
Of..... Term, 19... No.

In the Matter of

.....
Claimant,

vs.

.....
Defendant,

.....
Insurance Carrier.

Bureau of Work-
men's Compensation

Department of Labor
and Industry

Claim Petition No. ...

.....
Name of Appellant.

.....
Interest of

.....appeals from the decision of the Workmen's
Appellant

Compensation Board made, on the claim above
mentioned. Date

.....
Appellant.

Commonwealth of Pennsylvania, } ss.
County of Philadelphia.

.....on { affirmation
oath

says that he is { appellant,
one of the appellants,
.....of appellant, } and that this appeal is

not taken for the purpose of delay, but because the appellant.. be-
lieve.. that injustice has been done by the decision appealed from.

.....and subscribed before }
me this day of ..., 19.. }
.....of Appellant.

.....
Signature of Official before whom verification was made.

(Official Seal, if any.)

With the notice of appeal shall be filed such exceptions to the decision of the Board on points of law upon which the appellant intends to rely. Upon the filing of a notice of appeal, the Prothonotary shall issue a writ of *certiorari*, directed to the Workmen's Compensation Board, commanding it, within ten days after service thereof, to certify to the Court of Common Pleas to which the appeal has been assigned its entire record in the matter in which the appeal has been taken. The writ so issued shall be mailed by the Prothonotary to the Bureau of Workmen's Compensation at Harrisburg, with a copy of the exceptions. The Prothonotary shall enter the appeal for hearing on the Miscellaneous Argument List first called after the return of the *certiorari*, and shall send to the Board a certificate of the judgment of the court as soon as rendered, with a copy of any opinion that may be filed in the case. At the end of the period allowed by law for an appeal from the judgment of the court, the record of the Board shall be remitted to it by the Prothonotary, unless an appeal shall have been taken. If the judgment is appealed from, the record shall be remitted by the Prothonotary on its return from the appellate court.

RULINGS OF THE WORKMEN'S COMPENSATION BOARD.

1. The notice required by Section 302 (a) notifying the employe of the employer's refusal to accept Article III, of the Compensation Act of 1915, must be personally served upon each employe by furnishing him with a copy of the same, and by informing him of its contents in a language understood by him.

2. No certified copy of any agreement or claim petition will be issued, for the purpose of filing a lien as provided for in Section 429 of the Workmen's Compensation Act of 1915, when the employer is insured in the State Workmen's Insurance Fund and has given notice of an accident within seven days after its occurrence.

3. All information given by persons, companies, or corporations applying for exemption from insuring shall be considered strictly confidential and nothing contained therein shall be disclosed by any employes or attaches of this office or used for purposes of taxation.

4. In all cases in which applications for exemption from carrying insurance are made, the applicants must answer the following question: "State whether or not it will be your policy to discriminate against any class of employes for the purpose of reducing your liability under the Workmen's Compensation Act of 1915."

5. The Commonwealth and all counties, cities, boroughs, townships, school districts and other governmental authorities, created by the Laws of this Commonwealth and having the right to levy taxes, shall be exempt from insuring their liability upon application to the Workmen's Compensation Board.

6. Elective officers of the Commonwealth or of a county, city or other governmental authority created by the laws of this Commonwealth, and persons paid by the Commonwealth, county, city or other governmental authority for services rendered occasionally in the administration of governmental affairs, such as jurymen, witnesses and viewers, are not employes within the meaning of the Workmen's Compensation Act of 1915.

All appointive officers and subordinates who are paid by the Commonwealth or by any county, city or other governmental authority, and all other persons performing services for the Commonwealth or other governmental agencies created by it or for any municipal subdivision thereof, under a contract of hiring, are employes of the said Commonwealth, county, city or other governmental authority within the meaning of the Act.

7. Charitable corporations, colleges, hospitals, etc., being corporations not for profit, are employers within the meaning of the Workmen's Compensation Act of 1915, and if they do not give to their employes the notices provided in Section 302, are liable for compensation under Article III of said Act.

8. An ordinary private chauffeur while acting as such is engaged in domestic service within the meaning of the Supplemental Act No. 343, 1915 and is, therefore, not covered by the Workmen's Compensation Act of 1915.

9. The term "domestic service" in Supplemental Act No. 343 applies only to service in a private home and does not apply to service in a hotel, hospital or other institution.

10. Coal mining is a continuous employment, and not a seasonal employment, under the meaning of Section 309 of the Workmen's Compensation Act of 1915.

11. A nonresident alien woman claiming compensation as a dependent widow, may prove her marriage by the official record of the civil marriage or by the church record of a religious marriage.

12. It is contrary both to the letter and the spirit of the Workmen's Compensation Act of 1915 for an employer to levy contributions upon his employes, by reducing their wages or otherwise, for the purpose of meeting his liability under the Act.

Decision Sustaining Constitutionality of Workmen's Compensation Act
of 1915.

IN THE SUPREME COURT OF PENNSYLVANIA.
WESTERN DISTRICT.

William Anderson, Appellant

v.

Carnegie Steel Company

No 62 October Term, 1916

Appeal C. P. Allegheny

Filed July 1, 1916.

BROWN, C. J.

William Anderson brought this action against the Carnegie Steel Company to recover damages for injuries sustained while serving it as one of its employes on January 12, 1916. The affidavit of defense averred that the case was within the scope of the Workmen's Compensation Act of June 2, 1915, P. L. 736; that said act is constitutional and that what is therein provided is plaintiff's exclusive remedy. This raised a question of law and the court below disposed of it by entering judgment for the defendant in accordance with the provisions of section 20 of the procedure act of May 14, 1915, P. L. 483.

Nothing appears in plaintiff's statement of his claim to take his case out of the Workmen's Compensation Act, and its constitutionality is the sole question involved in this appeal. We take up the objections to its constitutionality in the order in which counsel for appellant has presented them.

It is first contended that section 201, Article II, of the Act of 1915 is unconstitutional, because (1) it is violative of Article I, section 9, of our constitution, which provides that one cannot be deprived of his property "unless by the judgment of his peers or the law of the land" and (2) because it is in contravention of the fourteenth amendment to the constitution of the United States, which declares that no one shall be deprived of his property "without due process of law." Section 201 is as follows: "In any action brought to recover damages for personal injury to an employe in the course of his employment, or for death resulting from such injury, it shall not be a defense—(a) That the injury was caused in whole or in part by the negligence of a fellow employe; or (b) That the employe had assumed the risk of the injury; or (c) That the injury was caused in any degree by the negligence of such employe, unless it be established that the injury was caused by such employe's intoxication or by his reckless indifference to danger. The burden

of proving such intoxication or reckless indifference to danger shall be upon the defendant, and the question shall be one of fact to be determined by the jury." It is urged that the taking away of these defenses is deprivation of property without due process of law. Section 201 applies only to actions at law for damages resulting from the negligence of employers, and by it they may no longer set up certain defenses available under the common law; but no one has property in any rule of that law. Rights of property may be acquired under it, and when so acquired, the owner of them is not to be deprived of them "unless by the judgment of his peers or the law of the land;" but, while rights of property created by the unwritten law cannot be taken away without due process of law, the common law itself may be changed by statute, and, from the time it is so changed, it operates in the future only as changed. The written and unwritten law are both rules of civil conduct proceeding from the supreme power of the State. "That one is unwritten and the other written can make no difference in their validity or effect. The common law did not become a part of the laws of the States of its own vigor. It has been adopted by constitutional provision, by statute or decision, and, we may say in passing, is not the same in all particulars in all the States. But however adopted, it expresses the policy of the State for the time being only and is subject to change by the power that adopted it; *Western Union Telegraph Company v. Commercial Milling Company*, 218 U. S. 406. In *Mondou v. N. Y. N. H. & H. R. R. Co.*, 223 U. S. 1, it was held that an act of congress abolishing the defenses of assumption of risk and the fellow servant rule, and providing that contributory negligence shall merely mitigate damages, did not violate the "due process of law" clause of that constitution, and, in so holding, it was said "A person has no property, no vested interest, in any rule of the common law. That is only one of the forms of municipal law, and is no more sacred than any other. Rights of property which have been created by the common law cannot be taken away without due process; but the law itself, as a rule of conduct, may be changed at the will ' ' ' of the legislature, unless prevented by constitutional limitations. Indeed the great office of statutes is to remedy defects in the common law as they are developed, and to adapt it to the changes of time and circumstances." Other cases to the same effect are; *Young v. Duncan*, 218 Mass., 346; *Borgnis v. Falk Co.*, 147 Wis. 327; *Section v. Newark Dist. Tel. Co.*, 84 N. J. L., 85; *State v. Creamer*, 85 Ohio St., 349. The first contention of the appellant is groundless.

It is next contended that section 204 of Article II of the act of 1915 is unconstitutional, because it is an unreasonable interference with the right of an individual to make his own contract. That

section is as follows: "No agreement, composition, or release of damages made before the happening of any accident, except the agreement defined in article three of this act, shall be valid or shall bar a claim for damages for the injury resulting therefrom; and any such agreement, other than that defined in article three herein, is declared to be against the public policy of this Commonwealth. The receipt of benefits from any association, society, or fund shall not bar the recovery of damages by action at law, nor the recovery of compensation under article three hereof; and any release executed in consideration of such benefits shall be void." At the time the act of 1915 was passed the settled law of this State was that a contract limiting or releasing damages for future negligence was against public policy; *Penna. R. R. v. Butler*, 57 Pa., 335; *Grogan & Merz v. Adams Express Co.*, 114 Pa., 523; *Penna. R. R. v. Raiondon*, 119 Pa., 577. The foregoing section is but a statutory extension of the same principle.

It is further urged that sections 301, 302 and 303 of Article III of the Act of 1915 are unconstitutional, because they are violative of Article I, section 6, of our constitution, which declares that "trial by jury shall be as heretofore, and the right thereof remain inviolate." If the foregoing sections are to be binding on an employer or employe in any case, they will be so only after both have agreed they shall be so bound. It is clearly pointed out in section 302 to each of the contracting parties how either of them may, in a very simple way, prevent the operation of Article III. Neither of them is deprived of a trial by jury except by his own consent, conclusively presumed to have been given, unless withheld in the manner prescribed by the Act. Either party, employer or employe, by his statement in writing to the other that the provisions of Article III of the Act "are not intended to apply," may prevent their application. Nothing is to be found in the said three sections depriving employer or employes of the constitutional right of a trial by jury. They merely permit a waiver of the same, if both so agree, and neither the Federal nor State constitution precludes such waiver; *Krugh v. Lycoming Fire Insurance Company*, 77 Pa. 15.

Finally, it is contended that Article III of the Act of 1915 is unconstitutional, because it is violative of section 21 of Article III of our constitution, which provides; "no act of the General Assembly shall limit the amount to be recovered for injuries resulting in death, or for injuries to persons or property; and in case of death from such injuries, the right of action shall survive, and the Gen-

eral Assembly shall prescribe for whose benefit such actions shall be prosecuted." It need only be said of this contention that the amount to be recovered for injuries to an employe is limited only when the parties to the contract of employment so agree.

The assignment of error is overruled and the judgment is affirmed.

POLICY OF BOARD AS TO PETITIONS FOR COMMUTATION.

The Workmen's Compensation Board outlined its policy as to Petition for Commutation in the following decision.

DEPARTMENT OF LABOR AND INDUSTRY—WORKMEN'S COMPENSATION BUREAU, HARRISBURG, PENNSYLVANIA.

Mary Stifura, Claimant	}	Petition for Commutation.
vs.		
Pressed Steel Car Co., Defendant		

OPINION—MACKAY—CHAIRMAN.

The above case came before our Board in the form of a petition presented by Mary Stifura asking that we commute certain continuing payments in present value in order that the whole sum be paid to her at once.

The compensation which is now being paid to her is in consequence of an agreement executed between herself and the Pressed Steel Company for herself and three small children because of the fact that her husband was killed in the course of his employment and while he was an employe of the defendant.

The important facts of the agreement are:

Age of children:

Daughter born Feb. 13, 1911, will be 16 on February 13, 1927.

Son born April 20, 1912, will be 16 on April 20, 1928.

Daughter born December 26, 1915, will be 16 on December 26, 1931.

Terms of agreement:

300 weeks, @ \$20 per week, 55%, ...	\$3,300
262 weeks, @ \$20 per week, 35%, ...	1,834
61 weeks, @ \$20 per week, 25%, ...	305
192 weeks, @ \$20 per week, 15%, ...	576
Total compensation, ...	<u>\$6,015</u>

In this case the widow has formed the opinion that although by this agreement she has been secured in substantial semimonthly payments until her youngest child shall have reached the age of sixteen, to wit: December 26, 1931, that she prefers to have the future payments commuted to present value and venture the whole sum in some uncertain undertaking.

It seems to the Board that it will be well to protect her as against herself by refusing her petition. These petitions for commutation come before us under Section 424 of the Workmen's Compensation Act. It will only be in rare cases that we can wisely exercise this discretion by granting such petitions. It is a great temptation to a widow or any beneficiary under this law to ask that the compensation payments be commuted to present value and paid in a lump sum. We think, however, in a great majority of these cases these petitions are ill-advised and a real wrong would be done to the petitioners if we granted their prayers.

The Act has wisely provided for the payments of compensation to be made at such times as the injured or the deceased would have received his pay; thereby providing a certain, modest, but sufficient sum at stated intervals so as to relieve the dependent of real want.

In the majority of these cases the dependents have been unaccustomed to the use of money in bulk and the sudden acquisition of a considerable sum might readily lead to its unwise expenditure or to its unfortunate investment. The widow might terminate her dependency by remarrying and then the money would probably be spent without regard to the rights or best interests of the children.

As a general rule we are opposed to granting such petitions to alien citizens who are desirous of taking the money to foreign countries. Awards have been made on the basis of their residence here. This same amount of money in a foreign country would be

worth more than it is here, hence, the difference in the Act in the amount to be awarded to alien dependents; not that our legislature intended to discriminate against this latter class but it attempted to equalize money values between foreign countries and ours.

We desire by this opinion to apprise the public that it will only be in the exceptionally meritorious case that we will grant commutation.

H. A. Mackey,
Chairman.

July 18, 1916.

LIST OF FORMS.

- Form W 1 —Employer's Notice to his Employe of his Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 2 —Notice to Laborers and Assistants not directly employed by the Principal Employer of his Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 3 —Notice to Employer of Employe or Laborer's Rejection of Article III of the Workmen's Compensation Act of 1915.
- Form W 4 —Employer's Notice of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 5 —Employer's Notice to Laborers and Assistants of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 6 —Employe's Notice of Termination of Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 7 —Proof of Service of Employer's Notice of his Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 7 a —Proof of Service of Employer's Notice to his Employes in Manner Permitted by Special Order of the Board.
- Form W 8 —Proof of Posting Notice to Laborers and Assistants hired by an Employe or Contractor of the Principal Employer's Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.

- Form W 9 —Notice of Proof of Service of Employee's Rejection or Termination of his Rejection or Acceptance of Article III of the Workmen's Compensation Act of 1915.
- Form W 10 —Employer's Application for the Privilege of Paying Compensation Provided in Article III of the Workmen's Compensation Act of 1915, without Insurance.
- Form W 11 —Order of the Workmen's Compensation Board of Pennsylvania Exempting an Employer subject to Article III of the Workmen's Compensation Act of 1915 from Insuring his Liability to Pay Compensation Thereunder.
- Form W 12 —Notice of Conditional Acceptance of Employer's Application for Exemption from Insurance.
- Form W 13 —Employer's Proof of Insurance under Article III of the Workmen's Compensation Act of 1915.
- Form W 14 —Agreement for Compensation for Disability.
- Form W 14 a—Supplemental Agreement for Termination or Modification of a Compensation Agreement or Award for Disability.
- Form W 15 —Agreement for Compensation for Death.
- Form W 15 a—Supplemental Agreement Terminating or Modifying an Agreement as to or an Award of Compensation for Death.
- Form W 16 —Approval of Compensation Agreement.
- Form W 17 —Disapproval of Compensation Agreement.
- Form W 18 —Employee's Claim Petition for Compensation for Disability.
- Form W 19 —Claim Petition for Compensation by Dependents of Deceased Employee.
- Form W 20 —Assignment of Claim Petition to Referee.
- Form W 21 —Notice to Defendant of Claim Petition.
- Form W 22 —Defendant's Answer to Claim Petition.
- Form W 23 —Referee's Notice of Hearing.
- Form W 24 —Referee's Award or Disallowance of Compensation.
- Form W 25 —Appeal from Referee Alleging Error of Law.
- Form W 26 —Appeal from Referee's Findings of Fact.

- Form W 27** —Appeal from Referee on the Ground of Fraud, Coercion, or other Improper Conduct of a Party in Interest.
- Form W 28** —Notice of Hearing of Appeal.
- Form W 29** —Notice of Hearing of the Case De Novo.
- Form W 30** —Petition to the Board for the Determination of Compensation for Disability under Facts agreed upon by the Parties.
- Form W 31** —Petition to the Workmen's Compensation Board to Determine the Compensation Payable under Agreed Facts to the Dependents of Deceased Employee.
- Form W 32** —Petition for Review of Compensation Agreement.
- Form W 33** —Petition by Employer for Commutation of Compensation.
- Form W 34** —Petition by Employee or Dependents for Commutation of Compensation.
- Form W 35** —Petition for Termination or Modification of Agreement or Award on Ground of Changed Disability.
- Form W 36** —Petition by Employer for Modification or Termination of a Compensation Agreement or Award on the Ground of Change in the Status of the Dependent or Dependents of a Deceased Employee.
- Form W 37** —Notice of the Filing of a Petition for the Review of an Agreement, the Termination or Modification of an Award or an Agreement, or the Commutation of Compensation due under an Award or Agreement, and of the Time and Place of Hearing thereof.
- Form W 38** —Answer to Petition for the Review of a Compensation Agreement.
- Form W 39** —Answer to Petition for the Commutation of Compensation Payable under an Agreement or Award.
- Form W 40** —Answer to Petition for the Modification or Termination of a Compensation Agreement or Award.
- Form W 41** —Notice of the Time and Place of Hearing of a Petition for the Review of an Agreement, the Termination or Modification of an Award or an Agreement, or the Commutation of Compensation due under an Award or Agreement.

- Form W 42 —Reference of Questions of Fact to Referee.
- Form W 43 —Notice of the Hearing by a Referee, to whom the Facts Alleged in a Petition have been Referred by the Workmen's Compensation Board for Determination.
- Form W 44 —Petition for Rehearing of a Question of Fact Referred to Referee.
- Form W 45 —Notice of Hearing of Petition for Rehearing upon Question of Fact Referred to Referee.
- Form W 46 —Notice Granting Rehearing by Board on Question of Fact Referred by it to a Referee and Filing Date Thereof.
- Form W 47 —Petition of Employer for Physical Examination of Employee.
- Form W 48 —Order to Employee to Submit to Physical Examination.
- Form W 49 —Petition of Employer for Further Physical Examination of Employee.
- Form W 50 —Order to Employee to Submit to Physical Re-Examination.
- Form W 51 —Receipt of Compensation Paid under a Compensation Agreement or Claim Petition.
- Form W 51 a—Certificate of the Payment of Compensation under an Agreement or Award.
- Form W 51 b—Final Receipt for Disability Paid under a Compensation Agreement or Claim Petition.
- Form W 51 c—Final Receipt for Death Paid under a Compensation Agreement or Claim Petition.
- Form W 51 d—Certificate of the Final Payment of Compensation under an Agreement or Award.
- Form W 52 —Approval of Claim for Legal Services and Disbursements.
- Form W 53 —Employer's Notice that he has taken out Insurance to cover his Liability to his Employees.
- Form W 54 —Employer's Notice to Employees of Exemption from Carrying Insurance.
- Form W 55 —Subpoena of Referee.
- Form W 56 —Subpoena of Workmen's Compensation Board.

WORKMEN'S COMPENSATION DISTRICTS.

- District No. 1**—Philadelphia, Delaware, Chester, Montgomery and Bucks Counties. Referees: W. B. Scott, George C. Klauder, North American Building, Broad and Sansom Sts., Philadelphia.
- District No. 2**—Berks, Schuylkill, Lehigh, Northampton, and Carbon Counties. Referee: Paul W. Houck, Ulmer Building, 207 N. Center St., Pottsville.
- District No. 3**—Montour, Columbia, Luzerne, Monroe, Pike, Wayne, Lackawanna, Susquehanna and Wyoming Counties. Referee: George W. Beemer, Union National Bank Building, Lackawanna and Washington Avenues, Scranton.
- District No. 4**—Dauphin, Lebanon, Lancaster, York, Adams, Franklin, Cumberland and Perry Counties. Referee: E. K. Saylor, Woolworth Building, Grant and Queen Sts., Lancaster.
- District No. 5**—Tioga, Lycoming, Bradford, Sullivan, Union, Snyder, Potter, Northumberland, Centre, Clearfield, Clinton and Cameron Counties. Referee: W. W. Champion, First National Bank Building, 21 W. 3rd St., Williamsport.
- District No. 6**—Cambria, Blair, Huntingdon, Mifflin, Juniata, Fulton, Bedford and Somerset Counties. Referee: Jacob Snyder, Commerce Building, 1434-36 Eleventh Ave., Altoona.
- District No. 7**—Erie, Warren, McKean, Elk, Forest, Venango, Mercer and Crawford Counties. Referee: G. Scott Smith, 216-20 Second St., Warren.
- District No. 8**—Lawrence, Butler, Clarion, Jefferson, Indiana, Armstrong, Westmoreland, Fayette, Greene, Washington, Beaver, and Allegheny Counties. Referees: Thos. J. Dunn, L. E. Christley, Hartje Building, Wood St. and First Ave., Pittsburgh.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner.



A BULLETIN OF INFORMATION FOR THE PUBLIC

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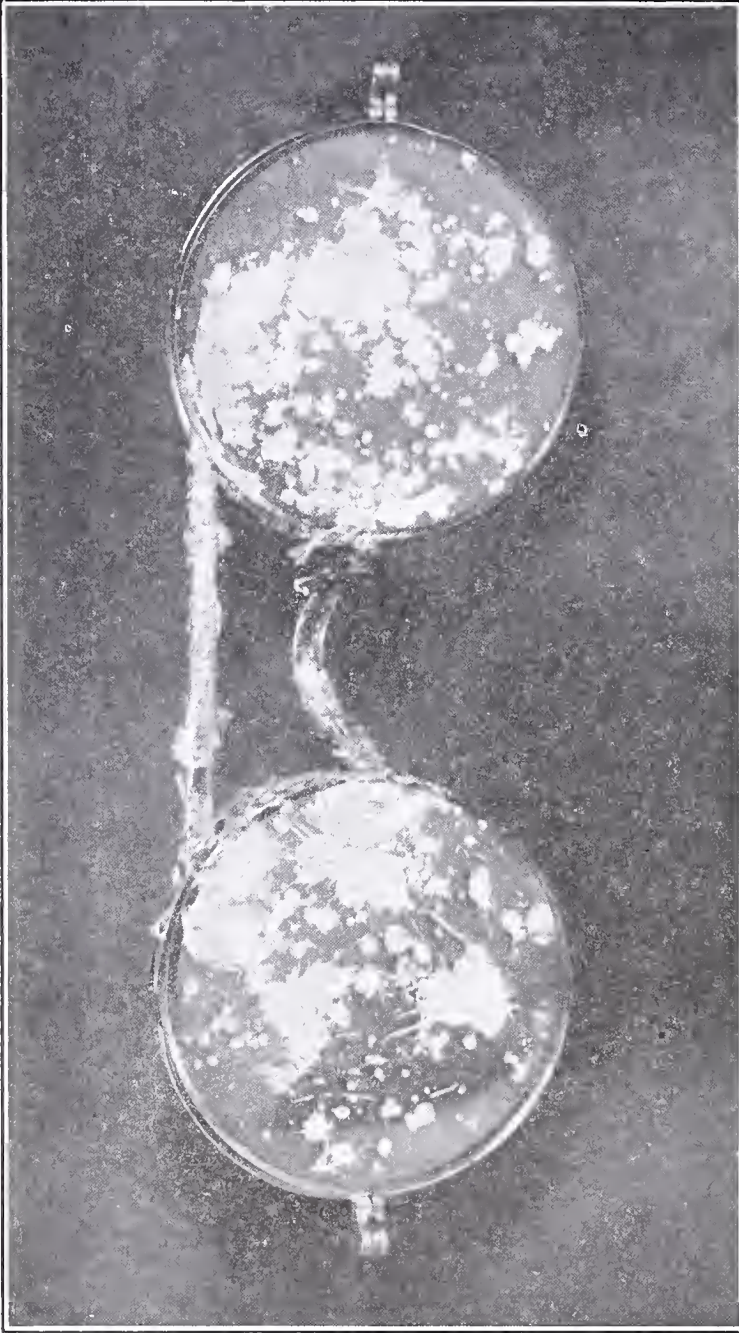
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MR. WORKER, WHAT ARE YOUR EYES WORTH?

These goggles were splattered with liquid hot Babbitt metal. They saved the eyes of the worker who wore them. He was only slightly burned. Tear out this page and tack it up in any shop where use of such goggles may save some worker from partial or total blindness.

INDUSTRIAL ILLUMINATION—A FACTOR IN CONSERVING VISION AND HEALTH OF WORKERS.

The proper lighting of workshops is an indispensable working condition in all establishments, and has attracted considerable attention during the past fifty years; during that time there has been a great advance in the methods employed to obtain proper lighting in the various industries. This improvement in industrial illumination has been evolved coincidentally with the remarkable development of machinery; and, indeed, may be considered as the natural result of the application of such machinery to industry, because the complicated mechanical processes practiced in the industries to-day require the best light that can be obtained. Strict adherence to this requirement results in economy of production for the manufacturer; it promotes efficiency among the workmen; and it minimizes the hazard to life and limb.

Moreover, in the last few years, there has been a remarkable increase in the number of industries carrying on work at night, which, likewise, has been an influential factor in the development of efficient illumination.

In the Annual Report of the Chief Factory Inspector of Great Britain for 1909, the necessity for adequate lighting is tersely set forth as follows:

“The importance of adequate lighting in industrial establishments is obvious, as a matter of fact, especially, where dangerous processes are carried on; as bearing upon health in many ways, directly or indirectly; and as a condition of efficient work. On the health side, it is hardly necessary to point out that inefficient illumination entails risk, strain and ultimate damage to the sight, even apart from interference with work, that it tends to the neglect of cleanliness, and adds to the risk of working in poisonous materials.”

From the standpoint of health, faulty illumination soon exerts damaging effects upon vision, by reason of varying intensities of light which produce sharp contrasts, glares and shadows.

The eye is a complicated organ, and proper vision is obtained by a perfect coordination of the two eyes through the joint action of fourteen separate muscles and four of the twelve cranial nerves. The eye is constantly in use during the waking hours, and, during that time, is often put on a continuous strain for hours at a time. To

maintain vision under these conditions requires a greater expenditure of muscle and nerve energy than any other function of the body.

Exposure to light of marked intensity, such as occurs among metal polishers, glassworkers, furnacemen, welders and lithographers, causes more or less serious visual defects. Any intense light, as a magnesium light, or that of an arc lamp, causes a decomposition of the retinal pigment faster than regeneration can take place—a condition of retinal fatigue. In addition thereto, there is a constant effort on the part of the pupil to exclude the excessive light by a powerful contraction, which results in pupillary pain and fatigue.

In this manner are explained the visual defects, which commonly occur in many trades, like gilding and polishing, in which the eyes are continuously focussed on incandescent material and polished surfaces which reflect brilliant rays.

Exposing the eyes to deficient light increases the strain of employment, and impairs the general health of the operatives. Certain occupations, in which the working conditions require close application of the eyes, as sewing, engraving, printing, textile work and watch-making, induce excessive strain on the eyes, and lead to fatigue of the eye muscles. Normally, objects close by are seen only by a process of accommodation, which is accomplished by muscular effort, and which produces a normal fatigue. This process of accommodation, if persistently maintained by continuous close work, will lead to abnormal fatigue and strain the eyes. Hence result errors of refraction, and when these are present in the eyes, distinct vision is possible only by excessive accommodation. This over accommodation early induces muscular fatigue, from which arises a large group of eye symptoms. Take for example an engraver. By virtue of his occupation, he sits for hours daily with his eyes focussed at short range on his work,—a state of continuous over accommodation. If he relaxes his accommodation, vision becomes indistinct, mistakes occur and often personal injury. The constant effort to maintain distinct vision causes fatigue of the muscles, spasm of the ciliary muscle and deficient convergence, from which result headache, defective vision, nervous exhaustion and various neuroses.

Eventually, under these deleterious influences, the eye passes into a condition of myopia or chronic nearsightedness, which is a distinct occupational disease due to eyestrain. This disease runs a progressive course, the vision gradually fails, the eye is exceedingly prone to acquire all kinds of inflammations, and total blindness often results.

Another example of an occupational disease due to eyestrain is “miner’s nystagmus” or dancing eyeball, which occurs among miners who work in a poor light with the eyes directed obliquely upward.

With adequate illumination and proper attention to the hygiene of the eyes, the hazards to vision can be eliminated.

A consideration of the composition of light is also of practical importance. By analysis with instruments of precision, the exact nature of the light can be determined, which is necessary in applying effective remedial agents to the irritating rays. Incandescent gas and electric lights contain visible and invisible rays. The former, by their glaring effects irritate the eyes. The latter are composed in part of ultra-violet rays, and, although invisible, are, nevertheless, extremely irritating to the eyes. They produce burning effects on the exposed skin, eyelids and eye structures, and it is believed they exert a more serious effect on the deeper structure of the eye. Most of the ultra-violet rays, after entering the eye, are absorbed by the refractive structures of the eye, which protect the retina. It is supposed, however, that the continued absorption of these rays causes cataract, for it is known that workmen exposed to extreme light and heat are especially liable to this disease.

Physicists tell us that lead is opaque to ultra-violet rays, and will stop their power of penetration. Therefore, rubber masks containing lead, and goggles with leaded lenses will afford protection to workmen exposed to these irritating rays. The dazzling effect of the visible rays can be removed by giving a "smoked effect" to the leaded lenses. Besides the smoked color, it has been suggested on theoretical grounds that the leaded lenses may be tinted with the color which is complementary to that of the predominating rays in any given light. This suggestion, however, remains to be verified by experiment.

Dr. E. M. Alger, in an address before the Second National Conference on Industrial Diseases held at Atlantic City in June, 1912, said: "Personally I believe that the eye diseases due to fatigue are far more important than we commonly suppose. More people are blind from malignant myopia ('nearsightedness') and retinal detachment than from all the trade poisonings. More inefficiency and more misery are caused by defective eyes than by diseased ones. There is no field in which it would be easier to enlist the enlightened self-interest of employers. Any intelligent shop management must consider the eyes of employes. There may be a place in our modern factory system for the lame and the halt, but not for the blind or the partly blind. * * * * * The oculist can not only do a great deal to convert unprofitable into profitable employes; he can pick out employe after employe whom no intelligent man could afford to hire. More than this, he can form a pretty good estimate of those who are fit to-day but will be unfit to-morrow. There has been so much exaggeration on the subject of eyestrain that the medical profession has disgustingly refused its attention, and yet I know of no one factor that affects the earning capacity of the laboring classes to

such an extent. I know of no medical field to-day in which the poor and the ignorant have been so entirely abandoned to the care of the incompetent and the dishonest. Here again intensive study is needed."

From the standpoint of accident prevention, the value of adequate illumination is important. The Travelers' Insurance Company estimates that about 25 per cent of avoidable accidents are due directly or indirectly to poor lighting. The Departmental Committee of Great Britain on Accidents in Factories reports that inadequate lighting is a very frequent cause of accident and of grave dangers. For example, in foundries dark passageways are dangerous. A workman may stumble over an obstacle while carrying a ladle of molten metal and incur serious injury. A strong dazzling light over a platform or over the landing at the top of a flight of stairs may be the cause of a fatal injury, because of its blinding effects. Dangerous machinery especially requires ample illumination so that every moving part is clearly seen. The purpose of a guard on such machinery may be defeated if poorly lighted. It has been observed that a large number of accidents occur in the winter months, especially in the afternoon—the time when artificial illumination is necessary. No doubt many mysterious accidents are directly due to defects in lighting.

Another result of faulty lighting is uncleanness. As a rule, a dark and gloomy workshop is a dirty place, and machinery that cannot be seen is usually dirty. A well lighted shop is usually clean, bright and cheerful.

In order to promote and maintain efficiency and economy in the industrial world and to minimize the hazards to health from faulty illumination, it is necessary to give the same serious study to the problems of illumination as has been given to other phases of industrial hygiene, as ventilation, temperature-humidity conditions and sanitation.

The subject of industrial lighting, especially from the engineering viewpoint, is broad; and our technical knowledge is limited. Much work yet remains to be done, and many varying conditions need to be clearly defined before this subject can be brought to the state of standardization. Intensive studies, statistical data and facts about conditions as found in every-day practice, when compiled, will serve as a basis from which proper standards may be established.

Meanwhile industrial welfare may be protected by the adoption of certain broad principles, which are easy of definition and general in application. A few general directions are here given.

The requirements of a hygienic light are, that its color shall be as near as possible that of sunlight, sufficiently diffused so as not to dazzle the eyes and impose a distinct strain; that there shall be no flickering or unsteadiness; that it shall be properly screened to re-

move the glare and direct the light downward on the work and not into the eyes of the worker; that the placement of the lamps shall be such as to avoid shadows, especially in drilling and cutting processes; and that it shall not vitiate the atmosphere nor evolve sufficient heat to create discomfort.

The Industrial Board of Pennsylvania, realizing the importance of proper illumination in industrial establishments, have promulgated a Lighting Code, which became operative June 1, 1916. This code sets forth the following requirements in the use of artificial light:

1. Adequate illumination intensity at the place of work, in accordance with a table of foot candle standards for different kinds of work.
2. Lamps shall be properly screened to minimize glare.
3. The placement of lamps shall be such as to avoid shadows and sharp contrasts of intensity, and secure a uniform distribution of light on the work.
4. Dependable emergency lighting shall be provided in all working and traversed spaces of industrial establishments, to be used when the regular lighting is out of service from accident or other cause.
5. Switches or controls shall be conveniently placed in the lighting system to permit the use of pilot or night lights at the place of entrance.

MECHANICAL DANGERS THAT MENACE THE EYES.

During the month of March, 1916, the number of industrial accidents causing eye injuries reported to the Department of Labor and Industry reached the total of 2,042. In April the number reported was 1,291.

These figures can not fail to elicit the questions as to what causes this suffering, loss in time and wages, and what means can be taken to prevent similar accidents.

Injuries to the eye may be divided into two groups—those caused by perversion of the physiological function of the eye such as damage caused by too much or by too little light, and injuries caused by mechanical or chemical means or by burns.

By far the greatest number of eye injuries are caused by flying particles. These may originate in various ways. Mushroomed tools,

either the tool used as a hammer or the tool that is struck, as chisels, drills, sledges, or any one of the large number of tools belonging to this class are liable to have the surface, which is constantly receiving the impact, flattened out causing numerous projections along the edge which are brittle and apt to be broken off. These particles may strike the operator or any one standing nearby. The same hazard exists in chipping and in the operation of high speed lathes or milling machines. In striking nails with smooth faced hammers it very commonly happens that the nail itself glances aside and has only too often found lodgment in the eye of the workman or his neighbor.

Tools should always be kept in good condition by frequent and proper dressing. Smooth-faced hammers should be replaced by those having scored or corrugated heads. If only suitable tools are used, however, there would remain many opportunities for eye injuries to occur. This risk can be eliminated by the use of goggles. The wearing of goggles is necessary not only where the wearer is exposed to comparatively large particles but in grinding or when any sharp, fine, dust is given off. The museum of the Department contains numerous specimens of goggles etched by just such substances. The effect on an eye, unprotected by goggles and exposed to conditions such as these can well be imagined.

Burns of the eye are found in all occupations exposing the workman to molten metal, to glass in a molten state, and to any process in which there are apt to occur explosions from any source or cause. Eliminating carelessness will eliminate a large number of these accidents, but when all possible has been done in this line there will remain a great many burns of the eye that can be prevented only by the use of goggles.

Chemical injuries to the eye may be caused by the splashing of irritating liquids or corrosive substances directly into the eye which results in greater or less destruction of the tissues of that organ, or by the effect of irritating fumes such as ammonia, chlorine or bromine which come into contact with the eye. These latter substances set up an irritation which cause such free lachrymation or "watering of the eyes" that vision is frequently very much obscured. It is in such instances that many accidents have occurred, the person affected being injured by walking into dangerous places which under other circumstances he would have been able to avoid.

Wood alcohol should not be omitted when considering the question of chemicals, as this substance has frequently caused permanent blindness simply by the exposure of an individual to its fumes.

Protection from fumes is best secured by the elimination of fumes altogether. In case of repair work in emergencies, helmets which exclude all fumes should be used without fail by the men making the repairs.

In considering the question of goggles, the most important point is to provide a goggle that is not only protective but is also comfortable. Before providing goggles for his workmen, the employer should consider the following points in the goggles to be selected:

1. They should be light in weight.
2. The glass should be clear.
3. They should be well fitting, preferably adjustable.
4. They should be ventilated.
5. They should be of a type that are easily put on and taken off.

If in purchasing goggles these points are carried in mind a satisfactory device should be obtained. The employer's duty does not cease however with the purchase of suitable goggles. It has been found that educational work is almost always necessary before the workman can be persuaded to assist in protecting himself in this way. It is not sufficient to provide goggles and give orders that they shall be worn, the man in the shop must be shown the reason why and shown it definitely and conclusively.

Presenting these advantages in the right light and providing good comfortable goggles will, almost without fail, cause the men to wear them and thus add to their contentment and safety.

INDUSTRIAL SAFETY vs. HIGH COST OF LIVING.

By COMMISSIONER JOHN PRICE JACKSON.

Every step toward greater safety in the industries aids in preventing higher cost of living and therefore industrial safety is of almost as vital importance to the prosperity of the general public as it is to the employers and employes.

Every injury, received by a worker in Pennsylvania's industries, whether resulting in disability or death creates a cost that must be paid by the people of Pennsylvania. This has always been true.

Before the Workmen's Compensation Act became effective these costs, for medical attention to the injured worker, for the support of his family after his death or during his disability, were either paid financially through charitable organizations, through costly court litigations for damages, or by the family of the injured worker in

hardship and perhaps even want. In any event the cost was there ultimately to be paid by the whole people.

The Workmen's Compensation system now meets this cost by scientific distribution of fixed financial benefits, to the injured employe or his dependents, shortly after the injury when the family most needs assistance and without the waste and unequable distribution which existed prior to the Workmen's Compensation Act.

Greater safety in industries means fewer workers killed and injured. Reduction in numbers of accidents, causing death or injury to workers, means reduction in the aggregate amount of compensation to be paid victims of industrial accidents. Fewer compensable injuries means less outlay for compensation payments by insurance companies and self-insurers. Fire insurance rates drop in communities where the fire hazard is small. Similarly compensation insurance rates drop in plants where the accident hazard is small.

If every industrial plant in Pennsylvania had a minimum accident hazard the saving in cost for injuries and consequently in compensation rates would be very great, and in a few years would far offset the cost of installing proper safety appliances and methods.

Greater safety means less suffering and hardship as a result of injuries and further than that splendid result, greater safety means less financial cost for injuries to workers. Workmen's Compensation is destined, to a very great degree, to save expense to the people of the Commonwealth of Pennsylvania by eliminating tens of thousands of costly industrial accidents.

The price of injuries to workers has always been paid financially by the whole people of the Commonwealth. Every activity and every campaign for safety first is a potent influence against increasing cost of commodities and an increasing cost of living for the whole people of this State.

KEEP FIRE ESCAPES FREE FROM SNOW AND ICE.

At this season of the year, fire escapes are frequently rendered impassable by accumulations of snow and ice. These means of exit in case of fire are valuable only as long as they are ready for immediate use. It is absolutely necessary that they be kept clear at all times.

After every snow storm all fire escapes should be immediately cleared and thus it will be impossible for them to become slippery through the melting of the snow and the formation of ice.

In many cases, owing to leaky spouts overhead, large accumulations of ice are found which render these escapes impassable. The obvious remedy for a condition of this kind is the immediate repair of the spout in question and the removal of the accumulations of ice.

A case which was brought to the attention of the officials of this Department was in one of the large cities of the Commonwealth where a fire escape, located on a school building in which there were three hundred pupils, was rendered impassable on two stories by the large icicles which formed not only overhead but also on the gratings of the escape. If a fire had occurred in that particular school and the fire escape had been the only means of exit, there would have been a great loss of life. Fortunately the condition was noticed and corrected before any fire occurred.

The owners of all buildings should carefully observe whether the fire escapes for which they are responsible are in a safe condition and are free from obstructions of any kind and especially snow and ice at this season of the year. If a catastrophe should ever occur and it could be shown that the fire escapes were impassable, owing to a blockage of any kind, the owner would be liable for criminal prosecution. Furthermore, from a humanitarian standpoint, these means of exit should always be kept ready for immediate use.

The real efficient fire escape, which is not subject to conditions as outlined above, is one which has a covering supported by an extension of the vertical rods in the railings. A large number of the theatres installing fire escapes at this time are now adopting this type as it is only during exceptionally heavy blizzards that such an escape can be rendered unsafe for use. The danger of overhanging icicles or ice under foot is done away with entirely as their formation, if such does occur, takes place at the edge of the roof and does not usually project into the passageway. It is urged that in future installations, this very efficient type of escape be universally installed.

BUREAU OF INSPECTION ACTIVE DURING SEPTEMBER PASSING UPON PLANS FOR APARTMENT HOUSES, PUBLIC HALLS AND FACTORIES, SUPERVISING INSPECTIONS OF BOILERS AND ELEVATORS, INSPECTING FOUNDRIES AND INVESTIGATING ACCIDENTS.

The Bureau of Inspection through its sub-divisions of building inspection, boiler inspection, elevator inspection, foundry inspection and accident investigation, has been active during the month of September, promoting safety for the workers and the general public.

Inspection of Building Plans.

"What is the cause of the rejection of plans for buildings submitted to the Division of Building Inspection of the Department of Labor and Industry for approval?"

This question has, at times, been asked by architects and contractors. The records show that the principal reason for rejection of plans is the absence or poor arrangement of exit facilities. In motion picture shows especially is this true. The other reasons for the rejection of moving picture plans are:—insufficient width of aisles; dangerous steps at entrances and exits; absence of necessary fire proofing; small size of booth; poor arrangement of heating, lighting or ventilating systems.

In regard to fire escapes, the main trouble seems to be in not submitting plans. The fire escape manufacturer fails to forward the floor plans of the building upon which the fire escape is to be erected. The engineers of this Department are unable to determine, from the drawing, whether or not the fire escape will be adequate for the building.

If the manufacturer will bear this fact in mind, it will be very little trouble for the person who takes the measurements at the building to secure the proper data with regard to the various floors, so that in making up a drawing the plan of floors can be shown in small square detail. A large number of the fire escape manufacturers are carrying out the idea of the Department along this line and are having their plans approved without delay.

During the month of September one hundred sets of new plans were received in the Division of Building Inspection of the Bureau of Inspection, and twenty-five sets of revised plans,—a total of 125. During the month, eighty sets were approved and forwarded to the owners through the local inspectors.

List of Plans Approved for Month of September, 1916, by Bureau of Inspection of the Department of Labor and Industry.

Fire Escapes.

Town.	Building.	Architect or Contractor.	Owner.
Midland.	Municipal.	Taylor & Dean.	Midland Boro.
Shippensburg.	Lodge hall.	Potts Mfg. Co.	Shapley & Hykes.
Knoxville.	Apartment.	Keystone Ornamental Iron Works.	W. D. Heesom.
Glenoiden.	Factory.	C. L. Baker.	H. K. Milford Co.
Delaware Water Gap.	Hotel.	Cameron Engineering Co.	Castle Inn.
Homestead.	Store and apartments.	Keystone Ornamental Iron Co.	Mrs. S. S. Winner.
Altoona.	Office building.	Geo. W. Anne & Son.	Ebert & Hastings.
York.	Factory.	Potts Mfg. Co.	Crystal Hos. Co.
Trevorton.	Lodge hall.	Noe-Wadlow Co.	I. O. O. F.
Muncy.	Hotel.	National Foundry Mfg. & Sup. Co.	Commercial Hotel.
Butler.	Apartment.	Taylor & Dean.	W. G. Ziegler.
Carnegie.	Apartment.	Taylor & Dean.	Husler Estate.
Williamsport.	Store building.	Taylor & Dean.	A. Troutman Sons.
White Marsh.	Hotel.	National Foundry Mfg. & Sup. Co.	European Hotel.
Travaskyn.	School.	Kline D. Baker.	Earl Cloos. St.
White Marsh.	Lodge hall.	Hazleton Iron Works.	I. O. O. F.
Travaskyn.	School.	Keystone Ornamental Iron Works.	S. Fayette Sch. Bd.
Cresson.	School.	Lancaster Machine & Struc. Co.	Cresson Orphanage.
Shamokin.	Store.	W. F. Remppis Co.	Unger Idw. Co.
S. Bethlehem.	Factory.	William Linker Co.	I. Lipschutz.
Lebanon.	Club house.	Geo. W. Anne & Son.	St. Mary's Church.
Millerstown.	Hotel.	Geo. W. Anne & Son.	Robert Hopple.
Easton.	Factory.	W. F. Remppis Co.	S. J. Hochman Co.
Monessen.	Apartment.	Charleol Iron Works.	5th Ave. Hotel.
Carnegie.	Home.	Homestead Iron Works Co.	John J. Joyce.
Williamsport.	Rooming house.	National Foundry Mfg. & Sup. Co.	Williamshot City Hospital.
Altoona.	Convent.	Madden Roller Works.	J. W. Witt.
Latrobe.	School.	Taylor & Dean.	Holy Family R. C.
Oak Lane.	Hall.	P. A. Walz.	Oak Lane Day School.
Hazleton.	Lodge Hall.	Chester A. Wagner.	C. L. Wagner.
Elizabeth.	School.	Taylor & Dean.	Elizabeth Land Co.
Mayfield.	Rooming house.	John J. Howley.	Mayfield School District.
Farrell.	Rooming house.	Ellwood City Iron Wire Works.	Mrs. M. Clifford.
S. Bethlehem.	Hall.	Lodovico Valenza Iron Works.	Harris Bros.
S. Bethlehem.	Factory.	Potts Mfg. Co.	City Council.
Carlisle.	School.	John Balzley Iron Works.	Lynn McCullough.
Williamsport.	Apartment.	L. Valenza Iron Works.	Boys Trade School.
S. Bethlehem.	Offile.	Danville Foundry & Mch. Co.	Tony Castellucci.
Danville.	Offile.	Danville Foundry & Mch. Co.	R. L. Marks.

List of Plans Approved for Month of September, 1916, by Bureau of Inspection of the Department of Labor and Industry—Continued.

Fire Escapes.

Town.	Building.	Architect or Contractor.	Owner.
Lebanon.	Factory.	Geo. W. Anne & Son.	Lebanon Silk Mill.
Easton.	Factory.	Ed. Paul Richter.	Wm. Correll.
Carlisle.	Mill.	Potts Mfg. Co.	Lockman Rib. Mill.
Harrisburg.	Apartments.	Potts Mfg. Co.	Miller Bros.
Perkasie.	Factory.	Edward L. Smith.	Harry E. Grim.
Taylor.	Hall and apartments.	Scranton Iron & Steel.	John W. Jones.
Colona.	Hotel.	John A. Long.	S. P. Haller Co.
Reading.	Apartments.	Wm. F. Remppis Co.	J. Keim Stauffer.
Carnegie.	Apartments and hall.	Keystone Ornamental Iron Co.	Gilbert Marlin.
Blomsburg.	Store.	Geo. W. Anne & Son.	F. P. Purcel.
Wilkesburg.	Store and apartments.	Taylor & Dean.	Mrs. E. Steele.
Milton.	School.	C. W. Mack.	Milton School Board.
Wilkes-Barre.	Store and apartments.	Kline D. Baker.	Osterhout Estate.
Coudersport.	School.	Scranton Iron and Steel.	Coudersport School Board.
Wilkes-Barre.	Factory.	W. F. Remppis Co.	Wilkes-Barre Silk Mill.
Delaware Water Gap.	Cameron Engineering Co.	W. F. Remppis Co.	J. H. Graves.
Easton.	Tenement House.	Shamokin Wagon Works.	Louis Sulkin.
Shamokin.	Lodge home.		K. of C.

Theatres.

Midland.	M. P. T.	L. H. Focht & Son.	Peoples Theatre.
Brasboro.	M. P. T.	Harry W. Altman.	Theodore Lacey.
Connellsville.	Theatre.	C. E. Sittler.	P. Mikalaras & Markas.
Boylestown.	M. P. T.	W. H. Lee.	Wm. B. Keely.
Berwick.	Theatre.	Julian Millard.	R. P. Smit.
Reading.	M. P. T.	Phillip S. Slack.	Carr & Schadd.
Philipsburg.	Theatre.	Franz C. Koenig.	C. H. Rowland.
Ligonier.	M. P. T.		R. A. Wilt.
Johnstown.	M. P. T.		Geo. Panagotoes.

Allentown, ...	Store and apartments, ...	David Levy, ...	A. Molofienky, ...
Allentown, ...	Store and apartments, ...	David Levy, ...	Albert & Berkov, ...
S. Bethlehem, ...	Apartment, ...	Butts & Glader, ...	Geo. Zboyovsky, ...
Forty Port, ...	Factory, ...	McCormick & French, ...	Jenkins-Kirby Pkg. Co.
Taylor, ...	Store and apartments, ...	John D. Thompson, ...	Chas. C. Kellerman, ...
Allentown, ...	Garage and apartments, ...	Royd & Stevart, ...	Jacob Waidelich, ...
Nazareth, ...	Y. M. C. A., ...	Harry G. Mohr, ...	Y. M. C. A., ...
Reading, ...	Store and apartments, ...	R. R. Markley & Smith Fence & Iron Co., ...	Walter Mast, ...
Harrisburg, ...	Hotel, ...	Knapp & Boswort, ...	Sam. Fishman, ...
Wilkes-Barre, ...	Home, .....	.....	Y. M. H. A., ...
Williamsburg, ...	Mill, .....	.....	Lebanon Valley Silk Mill, ...
Northampton Heights, ...	Store and apartments, ...		Geo. C. Prokon, ...

Bakeries.

Philadelphia, ...	Bakery, ...		S. Borrowsky, ...
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Foundries' Toilets.

Stowe, ...	Toilets, ...		Stanley Flagz Co., ...
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Summary.

Fire escapes, ...	57
Theatres, ...	9
Buildings, ...	12
Bakeries, ...	1
Foundry toilets, ...	1
Total, ...	80

New plans received during month of September, ...	89
Revised plans received during month of September, ...	26
Total, ...	115

Fire Escapes Ordered During the Month of September, 1916.

Lewisburg, ...	Lewisburg Mills, ...	Percy Whittaker, Mgr.
Roscoe, ...	Wm. Conkson, ...	Hotel.
S. Bethlehem, ...	A. H. Furlong, ...	Hotel.
S. Bethlehem, ...	A. Culhane, ...	216 E. 2d St.
S. Bethlehem, ...	Nathan Kroop, ...	401 E. 3d St.
Easton, ...	Morey-Larue Laundry Co., ...	
S. Bethlehem, ...	M. McBride, ...	9 E. 4th St.
Erie, ...	M. Liebel Est., ...	Niebel House.
Easton, ...	Lipschitz & Peter, ...	
S. Bethlehem, ...	Alex Graham, ...	21 E. 4th St.
Easton, ...	F. P. McGurley, ...	229 W. St.
S. Bethlehem, ...	Nathan Fritsch, ...	749 E. 6th St.
Nazareth, ...	Young Brothers, ...	Belvedere St.
Harrisburg, ...	J. B. Hoffman, ...	Market & 5th St.
Duryea, ...	John Waster, ...	Stephenson & New Sts.
Taylor, ...	John W. Jones, ...	775 Grove St.
New Kensington, ...	R. H. Bellman, ...	8th & 2d Ave.
Erie, ...	F. A. Lambagt, ...	Reed House.
Lordsville, ...	Tressler Orphans' Home, ...	
S. Bethlehem, ...	M. Bierbaum, ...	1039 Mechanic.
S. Bethlehem, ...	Frank Wagner, ...	12 E. 4th St.
S. Bethlehem, ...	Orlando Beniamino, ...	813 E. 4th St.
Easton, ...	G. Maiorana, ...	227 W. St.
Easton, ...	Jos. Youngkin, ...	121 Northampton St.
Easton, ...	Levi Rosenbaum, ...	454 Northampton St.
Bethlehem, ...	Jacob Judas, ...	90 E. Broad St.
McKees Falls, ...	Farmers' Inn, ...	
Uniontown, ...	W. Main Hotel, ...	
Eaglesmere, ...	Eaglesmere Borough School, ...	
Luzerne, ...	West Side Settlement Association, ...	218 Vaughan St.
Luzerne, ...	Thomas Hayden, ...	82 Main St.
Wilkesburg, ...	Old Couples' Home, ...	Swissvale Ave.

Care of Boilers and Causes of Boiler Troubles.

Since the Boiler Code became effective there has been considerable increase in the number of inspections reported to the Department of Labor and Industry. This fact indicates the spirit in which the code has been received by owners and users of boilers throughout the State.

The object of the Code is to establish better conditions in and around boilers and to educate the engineers and firemen operating them. In this work, the Division of Boiler Inspection is principally engaged.

It is a well-known fact that no matter how good a machine may be when delivered by the maker, its efficiency and length of life is governed by its careful and intelligent use. There is no part of a factory which requires more intelligent and considerate attention, or one which will demand a greater toll in life and property if neglected, than the boiler.

All boilers should be inspected internally at least once a year or as frequently as conditions of water and intensity of service demand, in order that any defects may be discovered and to permit of changes to prevent any action which has a tendency toward deterioration or affects the efficiency.

The two great enemies of boilers are scale and corrosion and it is safe to assume that the greater number of explosions are from

these two causes. No matter how well designed the boiler may be, it is not exempt from danger when it is allowed to corrode, and scale is prevalent. Therefore cleanliness and vigilance are necessary at all times.

Corrosion affects the boiler in the form of pitting and wasting away of the metal; sometimes so rapidly as to cause the boiler to be discontinued from use, for the pressure for which it was built, inside of three years.

Scale, the other enemy of the boiler, affects it by causing collapsed crown sheets, tubes and flues, bulging of the fire sheets and fire cracks which are expensive to repair and seriously affect the efficiency of the boiler. If permitted to remain for a considerable length of time, scale causes a change in structure in the plate and consequent weakening brought about by the continual overheating; thereby in time rendering the metal unfit.

Oil, which, in the minds of some engineers, is a good preventive of scale, should be kept out. There may be some truth in the theory that causes this use for oil, but it is too dangerous a re-agent to tamper with as a very light film of it over any part that is in contact with the products of combustion often lead to a bad bulge at that point and very often a rupture. Chemically pure or distilled water is very often destructive in its action, attacking the metal by wasting and pitting, and the best safeguard against this action is the use of a thin coating of lime scale.

Leaking tube ends and tube caps should not be permitted as the water mixing with the soot makes a combination that is particularly severe. When the time arrives for the boiler to be inspected it should be opened, cooled and thoroughly cleaned, soot should be swept off the tubes, shell and ashes removed from the grate and combustion chamber so as to give the inspector every opportunity to make a thorough inspection and the steam gauge should be removed so that it can be tested.

Attention should be paid to the recommendations of the inspectors as they are men of wide mechanical experience and have a thorough knowledge of boiler management. due to their training and opportunities for observation in making inspections in all types of boilers operating under varying conditions.

Causes and Prevention of Elevator Accidents.

Few people when riding on an elevator, realize the danger in which they are placed, unless the installation is equipped with modern safety appliances.

The first and most essential safety device, on elevators should be an effective apparatus, so arranged, as to bring the elevator car to a

standstill, at any point of its travel when loaded to full capacity. This device should operate automatically, in event of the hoisting cables tearing or the car becoming obstructed in its ascent.

The importance of this device, therefore, cannot and should not be under-estimated.

Accidents resulting from defective apparatus of this nature have been many, especially in passenger elevators.

The next important safety appliance, is the interlocking device, which should and must form a part of all passenger elevators hereafter installed in the State of Pennsylvania.

The number of serious accidents and fatalities due to the absence of interlocks on the landing doors of passenger elevators have, in past years, reached a high number. The main safety feature of the interlocking device lies in the fact that so long as the landing door remains open the power controlling mechanism is mechanically locked in the elevator car, thus rendering the operator powerless to move it, unless the landing door is closed.

In connection with this feature the landing doors are locked on the inside of shaftway, immediately upon the elevator leaving landings. This prevents any curious or hasty person from forcing the hatchway doors open and being either killed or crushed by the descending or ascending car, or by a disastrous fall. Another very important safeguard is the collapsible gate on an elevator car. In case the operator should be taken ill, or a passenger should accidentally fall or be pushed forward this gate will prevent the person or persons from being caught between the landings and car bottom or top.

"Safety First" efforts in the State of Pennsylvania embrace the construction, operation and inspection of all elevators with every consideration for the safety of the public.

With this humanitarian object in view the Division of Elevator Inspection was created in the Department of Labor and Industry. During the short period of time this branch of the Department has been in operation many hazardous conditions have been found and condemned, throughout the State. Also special provisions have been made, whereby the public at large may be assured of the regular inspection of all freight and passenger elevators by men competent to perform this duty. Passenger elevators shall hereafter be inspected every three months and freight elevators at six month intervals.

Inspection of Foundries.

Reports from the inspectors of the Department of Labor and Industry, assigned to special investigation of foundries, show that, during the month of September, in foundries, where unhealthful con-

ditions existed, they were found mainly in the wash and toilet rooms. In a number of foundries the men washed in a large iron trough approximately six feet long, two feet wide and eighteen inches deep. In one particular foundry, a trough of this size was used by twenty-five men without changing the water in it. At a given time the persons in charge would tap sufficient water in the tub for bathing purposes, regulating the temperature to about 100 degrees, and the men would take turns, three men washing at one time.

The matter of unsanitary toilets is a source of annoyance to inspectors, rubbish and filth being allowed to accumulate for weeks and no provision made for flushing or washing down the floors.

To offset these bad conditions inspectors have had the pleasure of inspecting many modern foundries. One particular type of toilet room was arranged without seats and with flushing pipes; being both sanitary and economical.

Other conditions requiring attention for the winter season, were the great number of broken window panes and the absence of storm doors. The latter, however, are rapidly being constructed.

The burning out of linseed oil in the dry sand cores produces a very black smoke which darkens the rooms and deposits a stain on the window glass causing bad lighting conditions. As to ventilation, there is not much trouble in summer but in the winter season, when it is necessary to keep all of the doors and windows closed, a proper ventilating system should be installed.

Other conditions which are factors in accidents and which are having the critical attention of inspectors are shoes and leggings of molders.

Wearing of old shoes is a bad idea. In case of a spill, a shoe which is in bad condition will allow the molten metal to reach the skin and burn it. It is cheaper, in the long run, to spend money for a new pair of molder's Congress shoes. The use of Congress shoes as well as the leggings is advised. A very good type of legging, worn in some foundries, is made of asbestos in the shape of a boot and covering the entire top of the foot is held in place by steel bands which are sprung over the leg.

The placing of water tanks in gangways for wetting down the sand is unsafe as there is always danger of the ground being damp or wet in the vicinity of the tank and if iron is spilled at that particular place, it flies in all direction and many a bad burn has resulted from this cause.

Ladles should always be dried in a separate apartment or on the outside of the building to avoid fires and eliminate gases and smoke from the work rooms.

The practice of carrying hand ladles the full length of the foundries is unsafe and ninety per cent of the risk of stumbling is

eliminated by the trolley system by which the ladle can be pushed down the gangways to the molders' floors.

In a number of steel foundries the steel is poured from ladles carried by overhead cranes without any attempt to provide gangways. These foundries must provide gangways. In the very old foundries there has, until recently, been very little change in the last thirty years and the fact of a number of men being fatally or seriously burned in any one foundry in a year seemed to be accepted as incidental to the employment.

The inspectors of this Department are endeavoring to prove that, under modern conditions, a foundry is as safe as any other manufacturing establishment and can be operated without loss of life or serious accidents.

Instructions have been issued by the inspectors to correct all unsafe conditions in foundries.

During the first nine months of this year nearly 100 foundry accidents have resulted fatally, emphasizing the need for greater caution in this particular industry.

Preventable Accidents.

Many fatal accidents occur through persons carelessly handling or touching electric wires, which are supposed to be "dead." The following case illustrates one of many instances of that kind.

Three employes of a chemical company were engaged in tearing down a shed, and while walking through the building one of them reached out and grasped an electric wire, which was dangling from the girders about a foot above him, but not in his path. He was killed almost instantly.

FOOLING WITH AIR-HOSE RESULTS IN DEATH.

Since January 1, at least five fatalities have occurred in the State from "fooling" with compressed air hose, and it is necessary that drastic action be taken for the punishment of those guilty of this thoughtless even murderous practice.

On August 21, a "practical joker" was amusing himself by blowing the hats from the heads of fellow employes with an air hose carrying about 90 pounds pressure. The final victim of the "joker," with his brother, was working over-time, and, after the other workers had gone, the "joker" turned the hose on them. While the victim was leaning over a core box, the "joker" placed the hose to his rectum and the air distended and ruptured the colon, the large intestine, causing death the next day.

The perpetrator of this act has been held for manslaughter.

CARELESSNESS:

While several employes of a large corporation were playing ball during lunch hour in a shop yard, the ball was knocked to the roof of one of the buildings. An employe climbed up a stationary ladder, located about forty feet from where the ball was lodged. To reach the ball it was necessary for him to walk along gutter or rain spout. When about half way to the point where the ball was lodged he tripped and fell a distance of about twenty-five feet, landing on the back of his head on a solid oak platform, fracturing his skull. Death occurred the following morning.

STUMBLE—CAUSES DEATH:

An employe of a trucking company while loading shavings on a wagon, at a planing mill, stumbled over a piece of timber that extended out from the wall, injuring him so badly that he died in ten days.

Obstructions on floors and passage ways are dangerous and this very common hazard should be eliminated.

INFECTION—LOCKJAW:

A car repairman was assisting in the unloading of potatoes from a car that had been wrecked, when he stepped on a nail which punctured his foot.

The wound became infected and he died eight days after the injury, from lockjaw.

INFECTION—MENINGITIS, FATAL:

An employe of a steel company bumped his head against a gas tank, and evidently thought the injury too slight to report to the plant hospital, and neglected to do so for three days. When he finally did report, the wound was found to be infected. Meningitis developed and he died two months after the date of injury.

CARELESSNESS—RESULT, EXPLOSION.

The following accident is one of many due to carelessness and thoughtlessness, and again emphasizes the necessity for care and caution at all times and at all places.

An employe of a slate company was engaged in tamping a hole preparatory to blasting, while the foreman "hooked-up" the wire leading from the hole to the exploding, or main, wire, as he supposed, but instead he "hooked-up" to the signal bell wires, which discharged the blast, instantly killing the loader, and seriously injuring himself.

These signal bell wires are not supposed to be extended to the bottom of the pit, but as the bell boy, (who is stationed at top of pit, from which point he signals the engineer after receiving a verbal signal from below) was absent for two days, these wires were lowered to the point of operation in the bottom of the pit, thus enabling the men to give their own signals. At the point where these signal wires extended into pit was the exploding wire, and the foreman without thinking connected to the wrong wire, with the above result.

**BUREAU OF STATISTICS AND INFORMATION COMPILES
AND PUBLISHES SECOND INDUSTRIAL DIRECTORY OF
30,000 PENNSYLVANIA INDUSTRIAL PLANTS.**

The Second Industrial Directory, containing the names of approximately 30,000 Pennsylvania industrial establishments, has been compiled in the Bureau of Statistics and Information of the Department of Labor and Industry.

This Industrial Directory, which will be of value to the organizations mobilizing data on industries to learn where munitions and supplies may be obtained in times of emergency, has been printed and is now being distributed. It has been prepared under authority given by the Act of Assembly of June 2, 1913.

In addition to its great value along lines of preparedness, the directory is virtually a roster of all Pennsylvania's manufacturing plants and will be valuable in expanding the trade of Pennsylvania's industries not only within the State but throughout the nation.

Commissioner Jackson is now considering a plan for placing copies of this Directory of Pennsylvania's Industries, in the United States Consular Offices in every foreign port, where trade with Pennsylvania would be feasible and where export business might be obtained.

An index of Pennsylvania's industries, as given in the directory, has already aroused interest and letters of inquiry, regarding the directory, have been received at the Department of Labor and Industry from foreign consuls in America. This volume, for trade expansion and industrial preparedness, is divided into four parts.

The first part contains the names of industrial establishments, arranged alphabetically and classified according to product. Coal com-

panies and public service corporations are also named in this part of the report.

Alphabetical classifications of the industries, by cities, towns and counties are given in the second part of the report. In this classification the products of each plant are given as well as the total number, sex and age of employes. Each county classification is preceded by a brief description of the industrial resources of that county and opportunities and natural advantages offered for various manufacturing enterprises. This part of the directory also contains tables showing the number of mercantile establishments in each county of the State.

The third part of the report contains lists of Boards of Trade, Business Men's Associations, Chambers of Commerce and Manufacturers' Associations within the State. Lists of Mayors, Burgesses, Aldermen, Justices of the Peace and Secretaries of School Boards are also given in this portion of the report as well as the names of the Workmen's Compensation Referees, location of their offices and lists of the counties composing each of the Compensation Districts.

Part four of the directory contains a list of all labor organizations of the State with the names of their officials and location of headquarters.

BUREAU OF STATISTICS AND INFORMATION ADOPTS NEW ACCIDENT FORM BLANKS FOR INDUSTRIES TO REPORT INJURIES SUSTAINED BY EMPLOYES DURING 1917.

New accident form blanks have been perfected and adopted in the Bureau of Statistics and Information for the reporting of injuries to employes in industrial work during 1917. These new forms are designated S-O and S-O-M. The form S-O is to be used by all industries other than mines, and the form S-O-M is for use in all mining industries. Some changes have been made in the questions appearing on the 1917 blanks for the purpose of simplification and to make more clear the purpose of the questions.

There will be a radical departure in the handling of accident blanks in 1917. Heretofore, when an employer has reported an accident, and the employe has not returned to work at the time of the report,

the employer has detached the supplemental blank. Beginning with January 1, 1917, the accident must be reported to the Bureau of Statistics and Information with the supplemental blank attached. A number will be given to the accident report, and the same number to the supplemental report. The supplemental report will then be returned to the employer, or the insurance carrier, as the case may be, and must be filed with the Bureau within thirty days, or, in any event when the employe returns to work.

The number designated by the Department of Labor and Industry on an accident blank, and the supplemental blank, must be carried on all correspondence and papers relating to this accident.

This system, it is hoped will result in there being fewer requests for duplicate reports, and also in the easier handling of all papers in the Workmen's Compensation Bureau.

New forms W-14, agreement for compensation for disability, W-15, agreement for compensation for death, W-18, claim petition for compensation for disability, and W-19 claim petition for compensation for death, W-51, receipt for compensation paid, and W-51 b, final receipt for compensation paid, have been devised. All these have been worked out as well as the accident report blank, as the result of conferences held with insurance adjusters, compensation managers of exempted companies in all parts of the State. Meetings were held in Philadelphia, Scranton and Pittsburgh, at which changes in the forms were discussed, and committees appointed to take the matter up with the representatives of the Department of Labor and Industry. A final meeting of all committees having in hand suggestions for changes, was held at Harrisburg recently, when the new forms were agreed upon.

WORK OF THE BUREAU OF MEDIATION AND ARBITRATION DURING SEPTEMBER, 1916.

In accordance with the provisions contained in the Act of the Legislature, creating the Bureau of Mediation and Arbitration in the Department of Labor and Industry, that whenever a difference arises between an employer and his employes, which cannot be readily adjusted, the mediators of the Department shall endeavor, by mediation, to effect an amicable settlement of the controversy, the good offices

of the Department were exercised in sixteen labor disputes in September, 1916.

The companies involved in these seventeen controversies, the number of employes affected and the results secured, as far as the Department reports indicate, are shown in the following table:

Name.	Industry.	Date of strike.	Workmen affected.	Result.
Asbestos Textile Co., Reynoldsville...	Asbestos textiles,	Sept. 18,	70	Adjusted September 30.
American Brakeshoe Co., Erie, ...	Brake shoes, ...	Sept. 15,	200	Adjusted September 20.
Eagle Bros. Silk Mill, Shamokin, ...	Silk goods, ...	Aug. 25,	755	Adjusted September 19.
National Radiator Co., Johnstown, ..	Radiators, ...	Sept. 6,	42	Adjusted September 15.
Union Radiator Co., Johnstown, ...	Radiators, ...	Sept. 7,	58	Adjusted September 15.
Sharon Steel Hoop Plant, Sharon, ..	Steel hoops, ...	Aug. 10,	1,100	Adjusted September 5.
Sharon Steel Tube Plant, Ellwood City, ...	Steel tubes, ...	Aug. 20,	350	Adjusted September 5.
Aetna Chemical Co., Heidelberg, ...	Chemicals, ...	Aug. 31,	40	Adjusted September 5.
Atlantic Refining Co., Philadelphia, ..	Oil products, ...	Aug. 18,	1,100	Adjusted September 15.
Hamburg Silk Mill, Hamburg, ...	Silk, ...	Aug. 25,	58	Adjusted September 11.
Shurfit Waist Co., Philadelphia, ...	Waists, ...	Sept. 14,	300	Adjusted September 19.
Baldwin Locomotive Plant, Eddystone, ..	.....	Sept. 19,	20	Adjusted September 20.
The Joseph Reid Gas Engine Co., Oil City, .....	.....	Sept. 20,	65	Pending.
Hay-Walker Brick Co., Templeton, ..	.....	Sept. 22,	125	Pending.
Wildman Plant, Norristown, ...	Moulders, ...	Sept. 20,	17	Pending.
Lehigh Coke Co., Didier, .....	.....	Sept. 29,	60	Pending.

Of the strikes that were pending at the date of the last report a number have been adjusted, the most notable being the settlement of the machinists' strike, in the Bradford Shops, through the efforts of the Department mediators. The following letter of appreciation in this case is similar to many such letters on file in the Department. The calls upon the Department for mediators from both employers and employes tax the capacity of the Department to supply the demand and indicate a growing appreciation of the work of mediation and conciliation of the Department of Labor and Industry.

INTERNATIONAL ASSOCIATION OF MACHINISTS.

Bradford Lodge, No. 422.

Bradford, Penna., Sept. 30, 1916.

MR. J. A. STEESE,

State Mediator.

Dear Sir: On Sept. 23 we were able to effect a general settlement with all the machine shops in Bradford, so on that date the strike was called off, and the men have returned to work and the strike has been pretty well forgotten now, and both sides are satisfied, the employers gave a good raise in wages and the machinists conceded the eight hour work day.

All the boys want to be remembered to you and want to thank Commissioner Jackson and yourself for your interest in their behalf during their strike.

Yours very truly truly,

H. A. COONEY,
President Machinist Local 422.

UNION RADIATOR COMPANY.

Johnstown, Penna., 9/28/16.

MR. M. P. FREDERICK,

Department of Labor & Industry,

Harrisburg, Penna.

Dear Sir:

We are pleased to write you that all but probably a half dozen of the moulders on strike when you were here, have returned to their work, in fact, did so within a day or so after your being here.

We want to thank you for the fair manner in which you took part in this; and feel that you really did very good work.

Yours truly,

UNION RADIATOR CO.,

CHAS. W. GOOD,

Secretary.

INDUSTRIAL BOARD PUBLISHING REPORT OF BUILDING
CODE COMMISSION. OUTLINE OF CODE.

During Governor Tener's administration a Commission was appointed "to investigate and report upon the needed requirements for the proper and safe construction of buildings within the Commonwealth and to determine the strength and character of materials used therein, and for the further purpose of suggesting new legislation relative to the same and codifying of existing legislation." The following is a list of the persons appointed on that Commission:

Edgar A. Weimer, Consulting Engineer, President, Lebanon, Pa.

Freas Styer, Secretary, Norristown, Pa.

James L. Stuart, Consulting Engineer, 609 Oliver Building, Pittsburgh, Pa.

Charles A. Hexamer, Civil Engineer, Bullitt Building, Philadelphia, Pa.

J. T. Windrim, Architect, Commonwealth Building, Philadelphia, Pa.

This Commission has completed its work and has submitted its report in the form of a Building Code, which, according to an action of the Legislature during the 1915 session, is being published by the Department of Labor and Industry.

In general, the Code maintains a safeguarding of the health and lives of persons incident to the use of the buildings within the Commonwealth of Pennsylvania. It covers four hundred and twenty-five (425) pages of fine type and is a far-reaching and comprehensive piece of work.

The following outline will give some idea of the scope of this Code:

TABLE OF CONTENTS.

Article	I.	Administration.
Article	II.	Definitions.
Article	III.	Heights of Building.
Article	IV.	Party Walls.
Article	V.	Fees and Inspections.
Article	VI.	Classification of Buildings.
Article	VII.	Class I Buildings: In this Class shall be included buildings in which people congregate for amusement, entertainment, social intercourse or worship. (a) Theaters. (b) Motion picture theaters. (c) Assembly halls. (d) Grandstands, summer theaters, observation towers, exhibition and fair buildings, amusement parks and roof gardens.
Article	VIII.	Class II Buildings: In this Class shall be included buildings used for the purposes of education and culture. (a) Primary, Grammar or High Schools, and buildings or portions thereof used for school purposes by pupils or students not averaging over eighteen (18) years of age. (b) Colleges, academies, seminaries, libraries, museums, art galleries and all school buildings not included under Class II, (a).
Article	IX.	Class III Buildings: In this Class shall be included buildings in which people are lodged or housed. (a) Tenement and apartment houses. (b) Hotels, apartment hotels, and club houses. (c) Dwellings. (d) Lodging houses and rooming houses.
Article	X.	Class IV Buildings: In this Class shall be included buildings in which people are received, confined or restrained. (a) Hospitals, pest houses, sanitariums and benevolent institutions. (b) Asylums, penal institutions and places of temporary detention.
Article	XI.	Class V Buildings: In this Class shall be included buildings used for manufacturing or storage purposes. (a) Factories. (b) Grain elevators, cold storage houses, warehouses, breweries, distilleries, slaughter houses, packing houses. (c) Powder mills, oil refineries, gasometers. (d) Power plants.
Article	XII.	Class VI Buildings: In this Class shall be included (a) Office buildings. (b) Stores and mercantile establishments. (c) Garages and stables.
Article	XIII.	Class VII Buildings: In this Class shall be included restaurants, cafes and eating houses.

Article	XIV.	Iron and Steel Construction of Buildings.
Article	XV.	Concrete Construction of Buildings.
Article	XVI.	Hollow Block and Terra Cotta Tile.
Article	XVII.	Walls and Foundations.
Article	XVIII.	Timber.
Article	XIX.	Fire-resistive Construction.
Article	XX.	Mill Construction.
Article	XXI.	Ordinary Construction.
Article	XXII.	Frame Construction.
Article	XXIII.	Stairways.
Article	XXIV.	Fire escapes, Standpipes and Automatic Sprinklers.
Article	XXV.	Elevators.
Article	XXVI.	Smoke Flues, Chimneys, Chimney Stacks, Fire Places and Hearths.
Article	XXVII.	Heating and Ventilating.
Article	XXVIII.	Sanitation and Plumbing.
Article	XXIX.	Electric Wiring and Apparatus.
Article	XXX.	Gas Generators and Gas Fitting.
Article	XXXI.	Plastering.
Article	XXXII.	Billboards, signboards, signs and fences, sidewalks, cornices, bay windows, porches, windows and other projections.
Article	XXXIII.	Safety during Construction.
Article	XXXIV.	Standard Appliances and Methods.—To be known as State Standards.
Article	XXXV.	Rat and Fly Proofing.
Article	XXXVI.	Repeal.

Each Class designated above is separately treated in detail under two heads:

1. All constructions to be made following the passage of the Act.
2. All buildings which are now in existence.

Each Article of this Code is complete in itself and does not require reference to any other parts. For example, anyone wishing to know the law governing the building of moving picture theaters would simply need to turn to the part of the Code governing the class of buildings under which moving picture theaters fall, and would there find, in concise form, all provisions regarding their construction. This obviates the difficulties of cross reading which are found in many laws.

It is believed that this Code will form a very valuable basis for developing uniform building regulations to cover the State as a whole and that the administration of such a set of regulations or Code can be so arranged as to assist local city and borough governments in carrying on their work without in any way diminishing their powers of self government.

INDUSTRIAL BOARD MAKES RULING TO PREVENT MIS- USE OF COMPRESSED AIR HOSE.

Misuse of compressed air hose, in manufacturing plants, having caused the deaths of at least six workers in Pennsylvania during this year, the Industrial Board, of the Department of Labor and Industry, has passed a ruling that an employe may not even direct the air blast, from such hose, on a fellow employe.

This ruling makes it a misdemeanor, punishable by fine or imprisonment, for any such violations even though the results may not be serious or fatal.

As a further means of preventing serious results from the fooling with air hose the inspectors of the Department of Labor and Industry will bring all such cases to the attention of police authorities in the community where they occur. In the event of serious results from such fooling, however, the case automatically becomes one for the local police officials.

BUREAU OF EMPLOYMENT PLACED 1,730 PERSONS IN POSITIONS DURING SEPTEMBER. SPECIAL ATTENTION GIVEN WOMEN APPLICANTS.

During the month of September, the Harrisburg office of the Bureau of Employment of the Department of Labor and Industry, divided its application and placement divisions according to sex, establishing rooms separate and distinct for women applicants. This arrangement not only makes it more comfortable and convenient for the women, but also aids in giving them the undivided attention of the woman placed in charge of this section.

The month of September was marked by an unusual number of requests for domestic help, so large that some housekeepers have been induced to take male instead of female help for which they had applied. The large number of orders for domestic help and the scarcity of applicants for this kind of work have caused the Bureau to per-

suade many young women, who are applicants for clerical positions, and yet lack the special training needed in this field, to enter desirable homes as helpers. At the same time, employers are impressed with the necessity for making work in the home more desirable and attractive by giving shorter hours, larger pay and wider privileges.

In the male section, the greater number of applicants has been in the line of unskilled labor and this includes a large group of colored men from the South, brought north to work in various places. Little difficulty has been found in placing these men, or any others in the unskilled line, who have made application.

The following table gives the figures for the month, for the various offices of the Employment Bureau:

HARRISBURG—SEPTEMBER—1916.

Total number of persons asked for by employes,.....	356
Number of applications for positions, ...	310
Number of persons referred to positions, ...	226
Number of positions filled, ...	176

PHILADELPHIA.

Total number of persons asked for by employers, ...	1158
Number of applications for positions, ...	1450
Number of persons referred to positions, ...	1123
Number of positions filled, ...	996

JOHNSTOWN.

Total number of persons asked for by employers, ...	178
Number of applications for positions, ...	71
Number of persons referred to positions, ...	63
Number of positions filled, ...	47

PITTSBURGH.

Total number of persons asked for by employers,.....	765
Number of applications for positions,.....	829
Number of persons referred to positions, ...	528
Number of positions filled, ...	483

ALTOONA.

Total number of persons asked for by employers, ...	52
Number of applications for positions, ...	63
Number of persons referred to positions, ...	35
Number of positions filled, ...	28

TOTAL.

Total number of persons asked for by employers, ...	2509
Total number of applications for positions, ...	2723
Total number of persons referred to positions, ...	1975
Total number of positions filled, ...	1730

In comparing the placement work during September with that of August, it is found that in September there were fewer orders, 2509 against 3687. In September, there were more applicants, 2723 against 2535. In September there were more persons referred and placed, 1975 against 1703 and 1730 against 1508.

The applications for positions during September were scattered over a great variety of occupations. The occupation drawing the largest number of applicants, was clerical work. Fourteen and one-half per cent of the applicants applied for positions as clerks of various kinds. The classes of occupations next in order which proved the most popular were, machinists, 4.4 per cent; laborers, 3.6 per cent; salesmen, 3.3 per cent. The small percentages show that no group of applicants is very large, for any one class of work.

In considering the orders for the month, the reverse is true. Fifty-four and four-tenths per cent of all the openings were for laborers. Then the percentages drop to 4.3 for machinists, 3.8 for leather workers, 1.9 for boiler makers.

The comparison between the number of applicants for work and the number of calls from employers for this same kind of work is seen in the following table. The figures of the applications and openings are the totals taken from the daily report sheets of all the offices for a certain day in September.

I.

<i>Applications for Positions.</i>	<i>Kind of Position.</i>	<i>Openings.</i>
173	Clerk, ...	33
53	Machinist, ...	327
43	Laborer, ...	4114
40	Salesman, ...	61
26	Farm Work, ...	31
24	Electrician, ...	14
18	Carpenter, ...	34
16	Waiter, ...	35
12	Plumber, ...	14
10	Painter, ...	19

II.

<i>Openings.</i>	<i>Kind of Position.</i>	<i>Applications for Positions.</i>
4114	Laborer, ...	43
327	Machinist, ...	53
293	Leather Worker, ...	4
144	Boiler Maker, ...	1
125	General Factory Hand,.....	4

In the division of Private Employment agencies, the Bureau was kept busy during the month receiving the applications for licenses to conduct employment agencies during the next fiscal year of the Bureau, October 1, 1916—October 1, 1917.

In spite of earnest work on the part of the investigators of the Bureau, complaints still come concerning fees which persons seeking positions, pay to agencies. The agents are allowed to take a fee from an applicant when they send him to a prospective employer, provided that they refund it on demand, if the applicant is not successful in obtaining the position to which he has been sent. There are sometimes difficulties arising concerning this refunding of fees.

During September there were fourteen complaints made against these agents, eleven proved legitimate, and the fees were refunded by the agents to applicants, through the work of the investigators of the Bureau. Three of the complaints, were not just and the agents concerned were allowed to retain the fee paid them. During the month \$41.50 was returned to applicants through the work of the Bureau's investigators on complaint that agents had not given satisfactory service.

There were two arrests made during the month for violating the Employment Agency Act. One party was dismissed with the payment of costs. The other case, involving two men, was dismissed on account of insufficient evidence.

The Bureau is just starting its second year and the outlook for useful activity is very encouraging. It is hoped that the new year will see splendid results.

BUREAU OF WORKMEN'S COMPENSATION HANDLING ENORMOUS VOLUME OF BUSINESS INCIDENT TO THE ENFORCEMENT OF THE WORKMEN'S COMPENSATION ACT.

Since the first day of January, of this year, when the Workmen's Compensation Act became effective, the Bureau of Workmen's Compensation, of the Department of Labor and Industry, has been operating at high tension. Up to October 1, 1916, there were received at the Bureau 56,684 accident reports for injuries where the disability of the victims extended over a period of fourteen days or more thus entitling them to compensation.

The first claim petition for compensation was received at the Bureau, in Harrisburg, on January 25. It originated in the district of which Paul W. Houck is referee and was consequently referred to him. On February 8, the first compensation agreement was received by the Bureau and approved by the Board.

During the first nine months of 1916, there have been 34,065 compensation agreements approved and approximately 1,000 disapproved largely on account of faulty computation of wages. These agreements were later drawn properly and approved.

The compensation stipulated in the various agreements for disability ranged from seventy-one cents to \$4,000 and in one instance a railroad company paid an employe \$5,000 although his compensation entitled him to \$4,000. It was explained that the larger amount was paid the employe inasmuch as he had rendered faithful services to the company for a number of years and the nature of his injury incapacitated him from earning a livelihood. There are instances where employers are paying their employes full wages for all time lost through injury, while other employers pay full wages for the first fourteen days of disability. One large manufacturing concern, in the western part of the State, pays 62 2-3 per cent of wages in compensation instead of the 50 per cent provided by the Act. All of these firms have full knowledge of the provisions of the law.

Accident reports covering 1,827 fatalities have been received at the Bureau of Statistics and Information up to October 1. Compensation agreements covering 757 of these fatal cases have been received, providing aggregate compensation to the amount of \$1,646,630.74. The smallest death claim paid was \$55 for funeral expenses of a victim who left no dependents. The largest death claim was \$7,500 to widow and dependents.

Many of the fatal cases are of railroad employes, who are regarded, by some railroad companies, as being engaged in interstate commerce and therefore to be taken care of under the Federal Liability Law. Consequently, Pennsylvania compensation agreements have not been received for such cases and until the Supreme Court renders a final decision on this subject the total amount of compensation due under the Workmen's Compensation Act of Pennsylvania cannot be definitely determined.

Claim petitions, filed with the Bureau and assigned to referees, numbered 1,146 up to October 1, or an average of approximately 114 for each of the ten referees. Of these 1,146 cases, referred to referees, awards were made in 300 cases and 150 were disallowed. Hearings before the referees were not necessary in 384 cases as agreements were signed by both parties concerned prior to a hearing before the referee. Twenty-eight cases were dismissed for non-appearance of claimant and 20 cases were withdrawn.

On October 1, 1916, there were 264 cases before the ten referees. Appeals to the Board from decisions of referees have been taken in 117 cases up to October 1, and of this number, twelve cases have been appealed from the decisions of the Board to the Common Pleas Courts.

By the terms of the Compensation Act, the Board may grant an employer exemption from the necessity of insuring his compensation liability. In each case, however, such employer must furnish to the Compensation Board, sufficient proof of his financial ability to protect his employes in case of accident. Such employers must also assure the Board, in writing, that they will not discriminate against married men or in any other manner because of this privilege. This privilege is also extended to governmental agencies having the power to levy taxes such as counties, cities, boroughs, towns and school districts.

Up to October 1, 1916, there were 593 exemptions from the necessity of insuring granted by the Compensation Board and 38 applications refused. The exemptions granted may be classified as follows:

Firms and corporations 344.

Governmental agencies 249.

From the date of the organization of the Workmen's Compensation Board until October 1, 1916, the Board had convened in 46 sessions in Harrisburg, Philadelphia, Scranton, Erie and Pittsburgh.

There is herewith appended a summary of compensation data.

Number of accident reports received January 1 to October 1, 1916, ...	56,684
Number of meetings held by the Board to October 1, 1916,.....	46
Number of agreements approved by Board (by months):	
January, ...	0
February, ...	830
March, ...	2,670
April, ...	4,000
May, ...	5,500
June, ...	5,100
July, ...	4,800
August, (no meetings), .....	.....
September, ...	9,713
Total, ...	32,613
Additional approvals recommended by the Bureau in September, ...	1,452
	<u>34,065</u>
Number of certificates of final payment issued, ...	20,500
Number of fatal accident reports (included above), ...	1,827
Number of agreements, fatal cases approved, ...	757
Number of claim petitions, ...	1,146
Awards, ...	300
Disallowed, ...	150
Agreements signed before a hearing, ...	384
Dismissed for non-appearance of claimant, ...	28
Withdrawn, ...	20
In the hands of the Referees, ...	264
Fatal accidents by months:	
January, ...	129
February, ...	222
March, ...	239
April, ...	169
May, ...	195
June, ...	182
July, ...	200
August, ...	246
September, ...	245
Total, ...	<u>1,827</u>

WORKMEN'S COMPENSATION CASES IN THE ANTHRACITE COAL FIELDS DURING THE FIRST EIGHT MONTHS OF 1916.

In the anthracite coal fields of Pennsylvania 7,291 Workmen's Compensation cases resulted from mine accidents during the first eight months of 1916. Of that number 333 were fatalities and 6,958 other workers were disabled for periods greater than 14 days. In other words, between January 1, and September 1, 1916, there were

7,291 anthracite coal miners who sustained injuries which caused disability for more than fourteen days and entitled them, or their dependents, to receive Workmen's Compensation.

A further analysis of those figures indicates that, of the 333 men killed, 233 were married and 100 were unmarried. Compensation agreements adjusting many of the fatal cases have been filed in the Compensation Bureau. The remaining fatal cases, lacking agreements, are being investigated and in many of these cases claim petitions have been filed with the Bureau of Workmen's Compensation.

Data compiled in the Bureau of Statistics and Information indicates \$13.80 as the average weekly wage of each of the 333 men killed making an aggregate annual pay roll of \$238,960.80. It will cost \$453,499.08 in compensation to pay the dependents according to law in 181 of the fatal cases or an average of \$2,505.51 for each man killed.

There are 481 children left fatherless by the 333 fatalities in the anthracite field.

Eighty-seven Americans were included in the death list, more than of any other nationality. Seventy-four Poles, included in the fatality list, left 144 children while the 87 Americans killed left 96 children. The nationalities of the other men killed are: Lithuanians, 43; Russians, 33; Slavish, 21; Italians, 32; Austrians, 18; Germans, 6; Welsh, 7; Irish, 4; Hungarians, 3; Greeks, 2; Scotch, 2; English, 1.

MONTHLY BULLETIN

OF THE

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



A BULLETIN OF INFORMATION FOR THE PUBLIC

DECEMBER, 1916.

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Goggles are
indispensable
in welding,
if the
eyes are to
be protected.



Even this
tiny welding
flame is a
menace to the
worker's
eyes.

Cuts by courtesy The Prest-O-Lite Co.

Eye protection is a necessity from the ultra-violet rays produced from welding processes. Read "Eye Injuries Caused by Excess or Deficiency of Light" on page 12.

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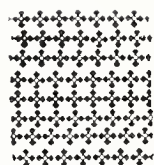
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THE PENNSYLVANIA WORKMEN'S COMPENSATION SYSTEM.

BY COMMISSIONER JOHN PRICE JACKSON.

The people have apparently given the Pennsylvania Workmen's Compensation System a general verdict of approval, after an experience of almost a year. This deduction is drawn from hundreds of letters received by the Pennsylvania Department of Labor and Industry and its officials, which are surprisingly uniform in their commendation of both the system and its administration.

The laws, upon which the system is based, are the expression, in Pennsylvania, of a decided trend of civilization to improve the conditions of freedom, justice, and welfare among mankind. The underlying basis of the laws, relating to this subject, is, that an industry should pay not only wages and profit, cost of repairs to machinery and raw material, but should also bear a reasonable portion of the cost in human beings broken or worn in industry's service. In more direct language, the purposes are three-fold: first, to give adequate medical attention and reasonable living support to the injured employe or his dependents; second, to give such support promptly at the time when it is needed, and without large overhead or legal expenses; and third, to encourage the state-wide movement for the elimination of accidents.

The two following incidents visibly illustrate the difference in conditions early this fall, after our compensation system had been in effect, and early last fall, before the law became effective.

About September, a year ago, a widow came to our offices in Harrisburg, and stated that her husband, shortly before, had been killed by an elevator dropping upon him while he was at work in the pit of the elevator shaft. She stated that the insurance carrier for the industrial company had offered her three hundred dollars indemnity. The agent informed her that this was a pure gratuity, as contributory negligence could be shown on the part of the employe in not having protected himself from the dangers which were the result of his death, and further that he had accepted the risk of his employment. Her lawyer advised her against prosecution though all the evidence indicated that the man was a careful, steady workman and had not been consciously negligent in taking precau-

tions. The woman looked delicate and unqualified to enter the bread-winning lists, and at the same time perform her duty to her five young children.

The husband of the second woman, who appeared early this fall, was killed under much the same conditions, though by different machinery. To her request as to whether we could aid her, she, within a fraction of an hour, received the proper papers to fill out, and was informed that the employer of her husband was ready to make a compensation agreement which would bring her a living income, at least, for a long period for herself and her family of young children.

In the case of the first woman practically no compensation for her support and that of her family was given nor could be obtained. Years of expensive litigation might be undertaken to be ended with probable failure, but even if a substantial compensation was received at the end of that time, it would probably be after she had gone through the most serious part of her stress, and but little would likely have remained after the necessary expenses of the action had been paid. She had no near relatives to aid her and as a result she was supported by charity and the small earnings she was able to make, and was compelled to neglect the practical upbringing and nourishment of her children. The cost always reverts to the community and the State when children are brought up improperly nourished and improperly trained.

The condition of the second woman was immeasurably more satisfactory. Her compensation began promptly, and she was enabled to give the greater part of her time to her proper functions, namely: the rearing of her family. Furthermore, the percentage of overhead expense, beyond the actual paid compensation, required for making all the arrangements necessary was practically negligible.

The extent and the volume of business entailed in the establishment of the Workmen's Compensation System for a great state like Pennsylvania can scarcely be appreciated by those who have not been directly connected with the administration of the Department of Labor and Industry. There are between a million and a half to two million employes, and, in round numbers, two hundred thousand employers in Pennsylvania, who have accepted, by the method defined in the law, to come under its terms. The number of accidents to December 1, 1916, reported to the Bureau of Statistics and Information of the Department of Labor and Industry was 230,221. Each one of these reports requires a number of operations upon it, after it reaches the Department, and each one of the accidents becomes a subject for medical attention. On December 1st, there had been filed in the Department, 48,500 agreements for compensation in the case of the more serious accidents, or of those employes who

lost more than two weeks at their labor. Each one of these agreements requires a large number of individual technical and clerical operations. With the office work explained above and the other allied duties required, many millions of distinct operations in the year must be accurately performed in the co-ordinated Bureaus of the Department of Labor and Industry. In addition to this, there must be performed the very important function of defining policies, working out routine of the business, developing forms and practices, and the most delicate and arduous work of settling differences, which cannot fail to arise now and then between employe and employer in such a system. It may be added that this enormous volume of business was not one which could be built up gradually as are most other businesses, but by the nature of the case, had to be started off with full force and volume on the first day of January, 1916.

It was determined to place the system in the Department of Labor and Industry, as a Bureau thereof, by reason of the fact that this Department was created for the specific purpose of advancing the welfare of both labor and industry, and therefore, it contained already several Bureaus which handled the business related to accident compensation. The Department of Labor and Industry includes the Bureau of Statistics and Information which had been already gathering, classifying, and tabulating industrial accidents, the names and addresses of employers, the numbers of their employes, character of business and much allied data.

The Department of Labor and Industry also includes the Bureau of Inspection which has district offices located throughout the State. Its duties are to aid employers and employes to reduce accidents, to investigate accidents and their causes, and in general to be the connecting link between the State government and industry in reducing, so far as possible, the awful losses which have been occurring. The Division of Hygiene and Engineering is related to the Bureau just named. It is composed of physicians and engineers whose duty it is to work out methods for the reduction of accidents, and to spread such information by means of inspectors and otherwise throughout the Commonwealth.

In thus establishing a Bureau of Workmen's Compensation in the Department of Labor and Industry, the law called for the appointment of a Board of three to be designated the Compensation Board, ten referees to be located in referee districts throughout the State, and an adequate clerical force to handle a portion of the great volume of business indicated above. It was quickly found that the business of the existing Bureau of Statistics and Information of the Department of Labor and Industry in gathering and tabulating accidents was closely allied to the business needs of the Bureau

of Compensation. These two Bureaus were promptly co-ordinated so as to act co-operatively and essentially as a single division of the Department without any duplication of effort.

It was also promptly found that the Compensation Board is so fully occupied with its most important responsibilities, namely: those of a judicial nature, and in drawing up rulings, modes of procedure, etc., that its members could not afford to give great amounts of time to details of executive work. As a result, the organization for handling the mass of business detail was made in the allied Bureaus of the Department of Labor and Industry as strong and effective as possible in order that the Board members might be freed to the greatest extent for their judicial duties. The fact that but few complaints have been received, and that there is little if any piling up of back work, is an indication that this object has been well attained.

It was natural in starting out a great business involving between two million and two and a quarter million people, and where every employer who had accidents among his employes must take positive action under the terms of the law, and where every employe injured needs to know more or less the steps he should take, that there should be some delay here and there in completing agreements, in accordance with the law, between the employer and employe. The Department of Labor and Industry, through its new and existing Bureaus, began its tremendous task with but little difficulty, friction, or delay. Nevertheless, in spite of State-wide circularization and personal instruction, full knowledge of all the provisions of the law could not be immediately made clear to all employers and employes. Finding this to be the case and knowing that any material amount of piling up of cases through delay or misunderstanding would, in such an enormous business, quickly cause serious chaos, the inspectors of the Bureau of Inspection of the Department of Labor and Industry, in accord with the arrangements made under the compensation law, were set to work, very shortly after the law became effective, to visit employers, employes, and insurance carriers wherever the Department found that such delays were occurring. The inspectors took up the individual cases and, where they could, explained the proper process for going on with the business and reported their findings to the Department in Harrisburg for future action if necessary. The result of this work which is still continuing, has been that the system, at the end of the eleventh month of its operation, is, apparently, thoroughly well established and is being carried out in a quite acceptable manner by all of the four parties at interest, namely: the government, the employers, the employes, and the insurance carriers. The members of the Compensation Board likewise did Trojan service in making the

provisions of the law known by giving much time to explaining its provisions in various parts of the State.

To employers and employes should be given a very large mede of credit for the fact that in Pennsylvania, the compensation system has been put into force with probably less friction and greater satisfaction to all than in any other place of which we are aware. Both of these vitally interested elements have entered into the work with a proper and friendly spirit and an intelligence which was essential to the success of the compensation system.

Emphasis, also must be laid upon a third element affecting the success of the system, namely: the medical profession. Practically every case of injury must receive medical attention. Though the amounts made available by the law have in many cases been inadequate to compensate properly members of this profession for their work, they have with great unanimity and self-sacrifice given their best diligence and energies, and have taken a particular interest in helping the work along. With the medical profession should be included the hospitals which have often been required, by reason of the terms of the law, to do their humanitarian work at less than cost.

The medical profession as a whole has been exceedingly active in its efforts to do its part and has through the medium of its county and State societies and by conferences in Harrisburg thoroughly well worked out the principal methods of procedure in order to accomplish its duties effectively.

One of the vital forces in the inception and subsequent operation of the Pennsylvania Compensation System has been the work of the ten referees, located in eight different geographical centers of population throughout the State.

These referees constitute the first points of appeal in any misunderstanding, disagreement or dispute between an injured employe and his employer as a result of varied interpretations of the Compensation Law.

Such tact, good judgment, and knowledge of the law have been displayed by the referees in disposing of approximately fifteen hundred such cases, that only about one in ten of those cases were appealed to the Compensation Board from the decision of the referees.

The referees have particularly well performed their functions of friendly mediators, and have thereby been instrumental in persuading thousands of employes and employers to reach satisfactory agreements without the necessity of carrying their temporary misunderstandings through the official machinery of the State Compensation System.

In this paper no attempt will be made to discuss the terms of the laws themselves, as they have been widely published, but those who

wish to have information thereupon should apply to the Department of Labor and Industry at Harrisburg for Bulletin No. 1 of the Compensation Bureau, which is a pamphlet giving in clear, brief outline the provisions of the entire law; Bulletin No. 2 which contains the rulings and findings of the Compensation Board and clearly indicates the practice of the Board and the Bureau; and Bulletin No. 3 which enlarges upon such rulings, and gives a list of the latest revised forms to be used in the system. A copy of the complete laws may also be obtained by application, and a pamphlet containing certain cardinal decisions of the Board,—Bulletin No. 4,—now in press, contains an abstract of all decisions made up to the present time. The Monthly Bulletin of the Department of Labor and Industry deals with various subjects affecting labor and industry, but includes particularly information about accidents and compensation for Pennsylvania. It may also be obtained by application.

It might be well, without going into details, to state that there are four methods of insurance whereby the employer may protect himself, namely: through the medium of stock insurance companies, mutual insurance companies, the State Insurance Fund, and by self insurance. It was feared by some that there would be some discrimination by self insurers as to the character of their employes, in order to lessen their insurance costs. The Department, through the Board and other officials, immediately investigated any such apparent cases, as were reported, and took vigorous precautions to make it known that the Department would use its entire power to eliminate any such practices. As a matter of fact the great bulk of our employers have accepted our compensation system in the spirit in which it was intended, and have not misused it to any extent in this way. Indeed, the Department has had more difficulty in regard to promptness in payment and in up-keep of the system as a whole by a few small insurance carriers with headquarters outside of the State, than it has had from these self insurers.

The State Insurance Fund was established, not for the purpose of creating a State monopoly and drive out private business, to the injury of the initiative and commercial confidence of our people, but distinctly as a regulator or balance wheel. The State Fund is under the control of a Board of three members; the Treasurer of the State, the Insurance Commissioner and the Commissioner of Labor and Industry. The first was included by reason of the fact that the Insurance Fund must receive and carry large funds, and these, as in the case of all other funds, should be subject to the supervision of the State Treasurer. The Insurance Commissioner was placed on the Board by reason of the fact that the law gives him the right to regulate accident compensation insurance rates for all insurance carriers. The Commissioner of Labor and Industry

was placed upon the Board by reason of the fact that he is at the head of the Department which includes the Compensation Bureau, and therefore is the connecting link between the Compensation Board and the Insurance Board.

The Insurance Board has already proven pre-eminently its usefulness for the purpose designated, namely that the Insurance Commissioner be able to obtain promptly and effectively the data he needs for deciding upon the adequacy and propriety of compensation insurance rates. It has already been shown that without the services of the Insurance Fund the Commissioner would be far less able to act with intelligence and justice to all. The Insurance Board, however, recognizing the wisdom of the State in establishing such a fund, to regulate rates as well as to insure employers,—upon whom the burden of the compensation system rests,—felt so strongly that it was unnecessary to make the State Insurance Fund a monopoly that the Board placed upon its minutes, which are open to the public, a resolution distinctly expressing that policy. The Board feels that the State Insurance Fund may, to the advantage of all, enter the open field in friendly competition with other insurance carriers, namely stock and mutual insurance companies.

In numbers of letters received by the Department, and by the Chairman of the Compensation Board, many employers have stated that their costs are no greater under the new system than were their costs in maintaining systems that they had voluntarily established, and the added cost of legal expenses which were involved in fighting cases brought against them in the courts. It is probable that in many cases the costs of compensation insurance are larger than before the new laws went into effect. However, this condition should be rapidly improved. The method for reducing these expenses to a point which will make them not only far less to employers, but which will save to the State, as a whole, an enormous sum annually is by the actual reduction of accidents. The Pennsylvania compensation system has done more than could any other agency to revivify and make effective the propaganda for the reduction of accidents. Under its inspiring force the industries of the State have renewed their efforts to reduce accidents to such an extent that hundreds of thousands of dangerous places have been guarded or removed during this year. Great numbers of safety organizations composed of committees of employers and employes have been organized and innumerable educational methods have been encouraged. In stimulating this phase of safety work the Industrial Board of the Department of Labor and Industry, has been active throughout the year. Industrial safety is, after all, the tendency of the compensation system which will prove of the greatest usefulness to our Commonwealth.

Industrial accidents reported to the Department will reach a total of approximately two hundred and fifty thousand this year. If the activities now in force for reducing these accidents are maintained, or better, augmented, the time will soon arrive when our reports will show a rapidly decreasing daily average and the time should not be so far distant when, at least, two-thirds of our industrial accidents will be eliminated. The result of this will mean a great reduction in the exceedingly heavy medical expenses of the present day and also the wiping out of the majority of the compensation payments, which, under the present terrific number of losses, are very great. Undoubtedly, this State will desire to move along with other States and other Nations by enlarging the amounts paid to those injured, by including certain specific vocational diseases as compensable, and in other ways. With a continued and increased activity in learning how to reduce accidents, such changes may be made without raising compensation insurance rates, and indeed, even with larger benefits, it should become possible to lower the rates as the accident reduction methods become more and more effective.

EYE INJURIES CAUSED BY EXCESS OR DEFICIENCY OF LIGHT.

The part played by mechanical injuries in the loss or the impairment of eyesight in our industries is, as stated in a previous issue of the Bulletin, tremendous. The amount of harm accomplished by improper illumination can only be estimated, and that very roughly. The great cause responsible for this lack of accurate data is that impairment of vision is usually so gradual in onset and course that it may take months before the afflicted individual realizes that the source of his discomfort and inefficiency is in his eyes.

It is just this insidiousness of action that is responsible for such apparent neglect upon the part of the employe as well as the employer. Frequently it happens that on entering a factory or office, the workers are found with the bright sunlight streaming in upon their work. On being advised to draw down the window shades the reply given is that it is not worth while as the sun shines upon their work for only a short time. If no shades are provided and the employer is taken to task because of their absence the usual

excuse given is that the employes do not want them and in fact do not use them if they are provided. Failure to provide protection from bright sunlight or the equally grave fault of not using protection that is provided is at the root of many cases of impaired eyesight.

Unshaded artificial light is another fruitful source of eye injury. Electric lamps, often on a swinging cord, are a common sight where it is necessary to provide additional illumination for an individual machine. These lamps are usually very nearly on a level with the eyes of the worker. The work may be satisfactorily illuminated but at the cost of electric current, the cost of efficiency and the cost of the operative's eyes. A properly shaded lamp would keep the light from the worker's eyes, relieving him of eyestrain, one of the great sources of inefficiency, and would, by directing the rays of light upon the point of operation, allow the use of a lamp of much lower candle power.

Not all eye injuries, the result of too much light, are caused by improper illumination. The prevalence of cataract among glass blowers, who are exposed to intense light and heat, is so well known as scarcely to need mention. It may be interesting however to cite the experience of a certain Bottle Trades Union. This union had at one time one hundred and ninety-nine men receiving aid from its superannuation fund and of this number fifty-two were incapacitated because of cataract. This condition while not so frequent an accompaniment of other trades is not at all rare in bakers, cooks, blacksmiths, steel foundrymen, puddlers or in any individual exposed to great light and heat.

Employments which expose the worker to the action of ultra-violet rays are of extreme importance in considering this subject. These rays which are invisible but chemically active are given off under normal conditions from such processes as oxy-acetylene and arc welding. They are a hazard too wherever the eyes of workmen are exposed to any unshaded arc. Their effects may therefore be looked for in connection with many operations about electric railways or electric light or power plants, in fact wherever there are dynamos, electric motors, or where a short circuit may occur from the blowing out of a fuse or from loose electrical connections. The individual experiencing this injury may know full well that he has been exposed to a very intense light, but the fact that he has received a severe injury may not be manifest to him for possibly twelve or even twenty-four hours. He may wake up in the night with a feeling of burning in his eyes and a scratchy sensation which may lead him to think that his eyes are full of sand. On attempting to open them the lids are frequently found to be so swollen that with the greatest effort only a mere chink appears between them. If the swell-

ing is not so great and the eyes can be opened, there is nevertheless a desire, because of the pain, to keep them closed, or at least to keep away from any bright light. The edges of the lids and the conjunctiva, the delicate membrane covering the eyeball and the inside of the lids, is red and inflamed. The eyes water very freely. In one out of every four cases there is total blindness. This usually disappears in two or three hours but there are not a few cases on record in which this loss of vision has lasted weeks or months and it occasionally is permanent. The other symptoms last two or three days, not really a long time but while they do last they are most uncomfortable and for the time being, disabling.

Ordinary glass cuts off a large proportion of ultra-violet rays. For this reason unprotected arc lights should not be used for illuminating purposes; care should always be exercised to shade them. Gray or smoked glass cuts off still more of the ultra-violet rays and is fairly serviceable when the light emitted is very bright. Smoked glass however obscures the vision for small objects and sharp outlines. It is essential therefore, in order to maintain clear vision and also to exclude from the eye these very harmful ultra-violet rays, that a glass be used which will not only allow clear definition of small objects but will also cut off these dangerous chemical rays. Such a glass is that of a red, yellow, or yellowish green color, often combined with chemicals which further impede the penetration of the ultra-violet rays. Goggles and masks fitted with this glass are now manufactured and marketed by many firms, firms who by the aid of their chemists and physicists have produced guards which are not only theoretically and scientifically correct but which also are comfortable and protective.

In addition to an overabundance of light, both natural and artificial, a fruitful source of trouble is dazzling caused by the reflection, from polished surfaces, of light from either one of these two sources. Defects arising from this cause are frequently found in polishers, buffers, engravers and tinsmiths. They may manifest themselves only by slight pain and an annoying though trivial dimness of vision. More frequently these symptoms are very much more severe ending in marked deterioration of the eye sight and sometimes in cataract.

The other extreme—too little light—is responsible for innumerable cases of eyestrain. Constant effort, on the part of the muscles of the eye, is expended in an effort to define more clearly the outlines and detail of objects rendered obscure by insufficient light. This constant tension upon the eyeball changes its shape, if it is of normal shape, to what is called a myopic or shortsighted eye. An eye already slightly shortsighted is readily made more so. Occupations requiring very close attention, even with good illumination of the

work, are apt to cause or accentuate this defect. The result of poor illumination then, upon typesetters, proof readers, watchmakers, jewelers, draftsmen, garment workers and embroiderers is really disastrous. In addition to the effect of eyestrain upon vision itself the general health of the individual is bound to suffer. The source of much headache, anaemia, fatigue produced without apparent corresponding exertion, and obscure cases of general failure in health is very frequently found to lie entirely in the eyes and to result from the ignorant abuse of these delicate organs.

The factors largely responsible for poor illumination are small, narrow windows, low power artificial lights placed too far from the point of operation, and neglect of facilities at hand for obtaining light. By this neglect is meant lack of cleanliness. This applies first of all to the windows. There is scarcely a single industrial locality which does not contain at least one building, and all too frequently several buildings, of the same type. They are built with a supply of window space sufficient to illuminate amply the interior. The dust and dirt accumulated upon them, however, destroy in large proportion their usefulness. The same condition is found in artificial lighting. The electric light bulb, dusty or streaked with dirt, the result of hurried and incomplete attempts at washing, often shaded with a fixture meant to be a reflector but which in reality is anything but that, faintly illumines the work and impairs the health and the efficiency of the worker.

To obtain the best results with natural lighting, the windows and skylights should be of ample size. The windows should extend as close as possible to the ceiling and the window area should not be less than one-sixth of the floor space of the room these windows are supposed to light. They should be of clear glass as free as possible from flaws and unevenness and should be broken by the minimum number of columns between the panes. Windows opening upon narrow passageways transmit a great deal more light if they are made of prismatic glass than if they are made of smooth glass. If the walls of buildings which face windows opening upon narrow courts are whitewashed or painted a light color, the amount of light reflected into these rooms from such walls will be found to be a decided influence in the lighting of the room. In this connection it may be stated that by painting the walls, ceilings and woodwork of a room a dark color, three or four times as much light is required to produce the same illumination as when light colors are used.

In installing artificial lights it is a great mistake to place the lights so that only the points of work are sharply illuminated, the rest of the room being in semidarkness. The proper method is to install several lights of high power close to the ceiling so that nowhere in the room will there be any sharp contrast of light and

shadow which, by the way, is one of the most harmful conditions under which the human eye is forced to function. Then if there is need for more intensive illuminations, individual lamps may be installed at each machine. These lamps however need not be of so high a power as when they are also used for general lighting of the room. They should of course be shaded so that no part of the filament or flame comes directly within the angle of vision. And under no circumstances should a lamp that can be reached by the hand of the workman while standing on the floor, or be brushed accidentally by a passer-by, be swung from a cord. Such a lamp is bound to be in motion frequently, due to accidental or intentional handling and a moving source of illumination has the same effect upon the eye as a flickering light. It causes eyestrain and fatigue which lead to ill health and inefficiency.

A protection to both employer and to employe in connection with this subject of light and eyesight is physical examination of all employes with especial reference to vision. Most applicants for work are ignorant of the true condition of their eyesight. This may be said of practically all people in every walk of life unless they have recently been examined by a competent oculist. By discovering the defects of the individuals presenting themselves for examination, these defects may often be corrected, or at least such persons may be given work which will cause the least possible strain upon their eyes. This is essential not only for the conservation of their vision but also as a protection to themselves and to their fellow workmen from the accidents which are so often the result of impaired eyesight with or without defective illumination.

Looking at this problem from any angle it is without doubt, apart from its humanitarian aspect, a paying proposition for every one concerned, and withal a proposition that is easy of application. Plenty of light, effectively shaded, received from sources that are properly placed, and from fixtures that are kept constantly cleaned should decrease accidents, increase output, and preserve to the workingman his greatest asset—sight.

INQUIRY INTO EQUIPMENT FOR RENDERING FIRST AID.

The phrase "First Aid," in common usage long before the slogan "Safety First" sprang into prominence and then outshone it, has apparently received new life and broader application by the spread of the safety movement. When the subject of "First Aid to the In-

jured" began to receive publicity many years ago, its application was popularly thought to be chiefly for the stopping of hemorrhage or the proper methods of applying splints to fractured limbs in order to transport the patient with the least amount of injury. Prompt action in contingencies such as these is undoubtedly of great importance. Ignorance on the part of the bystanders on such occasions has too often been the cause of fatal results to the injured person.

It is only within the last few years, however, that the importance of the first treatment of minor injuries has been so particularly emphasized. Statistics on the subject are not available but one may be quite safe in saying that the lack of immediate and proper attention to apparently insignificant injuries has been the cause of more lost time and probably just as many, or even more deaths than has neglect of more serious injuries. A broken bone, a deep cut or a severe crush of any part of the body will cause the injured person to seek the services of a physician at the earliest possible opportunity. On the contrary a scratch, a burn and, all too frequently, a punctured wound from a nail, or other sharp pointed instrument, is passed unheeded until after a few days when the pain, redness and swelling around the wound so alarm the injured man that he applies for medical aid and learns that blood poisoning has developed. This condition if seen early and given proper attention usually yields to treatment after a few days or weeks. If not taken in time the results may be absence from work for weeks and possibly months, intense pain, very often joints permanently stiffened, occasionally amputation of a hand, arm or leg, and in many instances death.

If, when a workman is injured, he would for one moment consider the train of events as given above he would never think of dressing any open wound with a quid of tobacco, with a dirty handkerchief or with oily waste. He would consider the five, ten or even fifteen minutes spent in giving the wound proper treatment, time advantageously spent.

The employe is not the only one to profit by proper first aid treatment. Every man absent from work because of injury received while at work is losing money for his employer by at least three different routes. The employer must pay for medical attention, prolonged by reason of neglect at the time of injury; he must pay compensation if the disability continues more than fourteen days; and he is losing money on an investment in an idle machine or in the cost of teaching a new man to run the machine. It would seem, therefore, that the slight cost of installing first aid equipment together with proper instruction of the employes in its use would soon be returned to the employer by reason of a lessening in the number

of infections following trivial wounds. In larger plants the constant attendance of a nurse or a physician would eliminate the necessity for anything but very elementary instruction to the employes on the subject of first aid.

It is for the purpose of thus serving both the employer and the employe that the inspectors of the Department of Labor and Industry are at this present time engaged in making a survey of the industrial plants in their various districts with special reference to this matter of equipment for the rendering of first aid to the injured. The form as given below is the one that is being filled in by the inspectors:

Form H-5

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF LABOR AND INDUSTRY
DIVISION OF INDUSTRIAL HYGIENE AND ENGINEERING

REPORT ON FIRST AID EQUIPMENT

Name of plant
Address: Street and number.....City.....County.....
Product manufactured
Male.....Males under 16 years.....
Number of employees: Total.....
Female.....Females under 16 years.....

Dispensary: Yes.	No.	Dispensary waiting room: Yes.	No.
Size of dispensary		Size of dispensary waiting room.....	
Stretcher: Yes.	No.	Number.....	Location.....
First aid box: Yes.	No.	Number.....	Location.....
Name of First Aid box used			
Nurse: Present constantly		Present part time.	
Physician: Present constantly		Present part time.	

.....
Inspector.

At the same time that the inspectors are gathering the information called for on the schedule, they are endeavoring to impress upon the employers who have not already provided an outfit for this purpose, the necessity for first aid equipment and the advantages which arise from such installations.

"MY EMPLOYEES NEVER GO THERE."

The thought expressed in the above or similar words, such as "My men have strict orders not to go near there" or "I never allow my employes to go there," are the replies most often received from employers by the inspectors of this Department after they have pointed out a dangerous place and have asked the employer to guard it. It must be admitted, however, that such a reply is never received from any employer who has made a thorough study of accidents, which have occurred in the past, with the idea of preventing a reoccurrence of them in the future. Such a study will always reveal the fact that the underlying principle of safeguarding is to make things foolproof.

Before the introduction of the law requiring the reporting of accidents it was not easy to convince the persons who thought their employes always stayed away from dangerous places that they were wrong, because it was difficult to cite examples which would show that they were mistaken in their belief. It is now, however, quite easy to find hundreds of such examples among the accident reports which are received every week and it is, therefore, quite easy to show to any fair-minded person the necessity of making everything foolproof.

It is also easy in most cases, where an employer makes such statements, to prove they are wrong by plain evidence gotten from a close examination of the surroundings. Not long ago an inspector of the Department noticed a space about eight to ten inches wide between some machinery and two gear wheels. On the floor was a platform about one foot in height placed there, no doubt, so an employe could stand on it and reach some controlling valves. By going around on the other side it was possible to reach these valves without going into this narrow space. The danger was pointed out to the employer and he was told to cover up the enmeshing gears. Being a man of reason he consented readily to do so but expressed the view that he did not believe his employes would go there. The inspector, however, called his attention to the fact that the platform showed signs of considerable wear and he was readily convinced that the only possible thing that could have worn the platform to such an extent was the constant use of it by the feet of his workmen. It was very fortunate that this condition was discovered in time before any accident occurred. A thoughtless movement of one or two inches would undoubtedly have resulted in the

clothing of the workman being caught in these gears with perhaps fatal results to the man.

Machine pits or other out-of-the-way places, and in some cases apparently inaccessible places, sometimes contain revolving shafts or pulleys or else belts or other kinds of moving machinery. The suggestion offered by the inspector to shut off by lock and key or some other suitable means such places again receives a similar answer. A close inspection of the floor or ground usually reveals the presence of paper, tobacco, burnt matches, or some other tangible evidence that an employe had stolen away in order to take a short smoke, nap or rest at the dinner hour or at a time when the work had slackened up a little.

Such other examples as placing the head under a descending pneumatic press or over a platform, so that a descending hoist could cause a fatality are foolish things sometimes done by employes for no apparent reason other than sheer indifference to danger. Not long ago a foreign laborer on a night shift crawled through a guard rail and out over a low shed roof to a narrow ledge on which he lay down and went to sleep. He woke up twenty-four hours later in the hospital after he had rolled off the ledge to the ground below, a distance of ten or fifteen feet, and had been rendered unconscious by the injuries he received from this fall.

Why employes do such things and take such chances is something which it is difficult to understand and impossible to explain but the fact remains that such examples clearly show the importance of eliminating hazards even in out-of-the-way places.

SAFETY ENTERTAINMENTS SUCCESSFUL IN TEACHING CAREFULNESS.

A thorough trying out, by the Division of Hygiene and Engineering, of the Department of Labor and Industry, of the various methods of bringing the matter of Accident Prevention to the attention of the citizens of this Commonwealth and especially to the employers and employes has clearly demonstrated the fact that the "Motion Picture Entertainment" which has been presented in many different parts of the State seems to be the best solution of the problem.

Not only have employers and employes expressed themselves as more favorably impressed by these meetings than by any other methods, but the newspapers have also set forth editorially the wonderful good which can be accomplished by holding meetings of this kind.

A few such examples are as follows:

ALTOONA MIRROR.

"EVERY MAN, WOMAN AND CHILD in Altoona should see the pictures now being shown in the Altoona High School and hear the lectures that are delivered in connection with the exhibition.

"The pictures illustrate and emphasize the importance of safety first. They bring close home, make vividly real, the awful consequences of carelessness and indifference to the dangers which confront us every day.

"Many persons, despite repeated warnings, fail to practice ordinary prudence. They think they are too alert and too careful to fall the victims of accidents. They make a grave mistake.

"The truth of the matter is they do not know how serious is the menace until they see the pictures on the screen. Then they realize it, and it makes a lasting impression on the most of them. Thereafter they manifest a greater degree of caution.

"The State Department of Labor and Industry is familiar with the weakness of human nature and it knows the value of the acted scene over the written word in some instances, which is probably what suggested the moving picture as the medium of saving life and limb.

"The gruesome record is reason enough for the display of these films. During the first three months of this year 700 persons were killed and 70,000 injured in Pennsylvania. Do you grasp the significance of those figures?

"A battle in which 700 were killed and 70,000 wounded would make the average person gasp with horror. But if we spread the casualties out over three months and distribute the victims along the railroads, in mines, in factories, in industrial plants and on the public highways we seem to accept this slaughter as a matter of course, as an attendant evil of our social development and progress.

"Yet 75 per cent of the accidents are preventable by safety methods!

"The State is doing a splendid thing in pictorially pounding home the necessity for the universal adoption of safety first rules. We need this lesson here in Altoona. The Altoona Mirror is quite sure that it will prove highly beneficial."

WAYNESBORO RECORD.

"There was a safety entertainment here this week, by a representative of the State Department of Labor and Industry, under the auspices of the Board of Trade and the local manufacturers. THE RECORD has referred to it at length.

"It touches on it again because appreciation of it is growing, following reflection upon the value of the lessons taught.

It is not surprising, therefore, to learn that some of the heads of the factories have made the suggestion that there be a repetition of the entertainment here next year with some different movie films.

"That is the highest tribute to the worth of the effort of the Department to secure more safety for men in the shops and men, women and children on the streets."

Such comment as the above in the daily press should clearly demonstrate to every person the great educational value of these pictures.

On numerous occasions where it was not thought advisable to go to the expense, or no facilities were at hand for giving the motion pictures, representatives of the Department have given illustrated lectures on safety using some of the 300 or 400 lantern slides which the Department now has available for this purpose. A few of the subjects covered in these talks are:

The Conservation of Human Life and Happiness.

Dust and Fumes—The Curse of Industrial Life.

The Casualties of Industry—How They May Be Prevented.

Fire Loss or Fire Prevention—Which?

Safety—What it Means—Is it Worth While?

Sanitation—An Essential to Industry.

Safety in the Chemical Industry.

For some time past motion picture films and lantern slides have been loaned to any person who had requested their use. On numerous occasions however, they have been damaged quite seriously so that it was necessary to refuse to do this any longer unless, a representative of the Department accompanied the same. Accordingly the following regulations have been adopted.

CONDITIONS UNDER WHICH MOTION PICTURES AND LANTERN SLIDES ON SAFETY MAY BE OBTAINED FROM THE DEPARTMENT OF LABOR AND INDUSTRY.

Safety motion pictures together with slides and explanatory remarks by a representative of the Division of Industrial Hygiene and Engineering of the Department of Labor and Industry will be sent to any community, individual or firm under the following conditions:

1. That all local arrangements and expenses be assumed by some local body or representative such as a Chamber of Commerce, a Board of Trade, a Manufacturers' Association, a Manufacturing Establishment, Labor Organizations, Churches, Societies, Schools or Individuals.

2. That a suitable hall equipped with a first-class projection apparatus enclosed in a standard booth together with an experienced operator should be provided. It is preferable that the use of a local motion picture house, theatre or other suitable auditorium where there are permanent arrangements for showing motion pictures be secured.

In exceptional cases where these local facilities are not available the Department *may* be able to provide a motion picture machine and booth, but this will not be done unless arrangements as noted above, cannot be made and this only if the presence of a good sized audience can be assured. This latter condition is added because the Department does not feel warranted in assuming the increased expense of transporting this apparatus unless a large number of people can be reached.

The Department will assume the expense of procuring the films, also the expenses of the speaker and guarantee to give an entertainment which will not only prove interesting but instructive along safety lines.

The following methods of procedure for arranging such a meeting have proven most successful:

Where it has been impossible to obtain the free use of a hall or theatre, and a society, firm or organization has not been able individually to bear the expense of rental, two or three organizations, industries or individuals have united and collectively contributed a sum sufficient to cover these expenses, which are usually very small.

Tickets of admission bearing an inscription similar to the following are distributed by these organizations.

"SAFETY ENTERTAINMENT"

Auspices.....and

Direction Pennsylvania

Department of Labor and Industry

SPLENDID MOTION PICTURES ON SAVING LIFE AND LIMB

..... THEATRE

Monday Night, Nov. 27, 1916, 8 o'clock

Admission Free—By Ticket Only

These tickets are given out to employes together with their immediate families and any other persons who might be interested in such an entertainment. It is usually safe to distribute 10 per cent to 15 per cent more tickets than the auditorium will conveniently seat, but it is well to restrict the number of tickets given out to such a figure that the number of persons seeking admission will not exceed the seating capacity of the hall, as overcrowding of places of amusement is strictly against the policy of the Department of Labor and Industry.

It has been found desirable in many places where the entertainment has been given in the evening to give an afternoon performance for the school children. The school authorities are usually willing to give up part of the afternoon session of the school and march the pupils, under the care of the teachers, to the hall.

LECTURES WITH SLIDES.

The Division of Industrial Hygiene and Engineering also has available several lectures, illustrated by slides, on various phases of the safety movement, which will be sent out upon request of societies, individuals or firms, as far as it is possible to arrange satisfactory dates.

The Department will furnish these services free, providing the local parties procure a suitable exhibition hall. It is possible to connect the lantern, which the speaker will bring along, to any electric light circuit providing an outlet or extension cord is available within about ten feet of the location where the lantern must be set up. In cases where no electric current is available, by special arrangement an acetylene tank can be used. In all cases a screen of approximately 14 feet square however should be provided by the local committee.

Address all correspondence with reference to motion pictures and slides to the Division of Industrial Hygiene and Engineering, Room 506, Kunkel Building, Harrisburg, Pa.

ENTERTAINMENT WILL NOT BE GIVEN IN A SECOND STORY
THEATRE.

**BUREAU OF INSPECTION PROMOTING SAFETY IN HOTELS,
 FACTORIES AND PUBLIC STRUCTURES, SUPERVISING
 INSPECTIONS OF BOILERS AND ELEVATORS, INVEST-
 IGATING ACCIDENTS AND CONTINUING GENERAL IN-
 SPECTION WORK.**

The Bureau of Inspection, during October, concentrated through its Division of Building Inspection in an effort to make as safe as possible, against the danger of fire and panic, summer hotels at resort places. These hotels are usually of frame construction and the work of rendering them safe from the standpoint of exits and fire escapes was resumed, by the Bureau, in the autumn, as these structural changes can best be made during the winter months when these summer hotels are unoccupied.

A circular letter, sent to inspectors in the localities where these hotels are located, started the specialized inspection work and resulted in a decided effort on the part of owners of such hotels to safeguard their patrons from fire and panic. Increased exit facilities, fire escapes and fire fighting appliances are being installed, where needed.

During the month of October a large number of plans for fire escapes, to be erected on summer hotels, were received and approved in this Department. It is the intention of this Department, through the Bureau of Inspection, to make every effort to eliminate the fire trap summer hotel. No summer hotel may be opened unless the State regulations as to fire protection and fire prevention are complied with. It is absolutely essential that the means of egress on such hotels be the safest and best possible as many of these hotels are of frame construction and in some instances the water supply for fire fighting is limited.

The total number of plans submitted, for all types of structures, to the Division of Building Inspection in this Department, during October, was less than the number submitted in September, undoubtedly due to the approach of winter and consequent cessation of construction work. The number of fire escape plans submitted to the Department for approval was unusually large and indicated that the instructions issued by the inspectors are being promptly fulfilled.

There were 69 sets of plans approved during October out of a total of 76 sets of new plans submitted. There were in addition 26 sets of revised plans submitted. Comparatively few plans for fire escapes have been rejected or held in abeyance as the fire escape manufact-

urers have been well advised, by circular letters and other literature, from this Department, of the provisions of the Act of Assembly governing fire escapes. Following is the text of the circular letter sent to inspectors of the Department advising them to pay special attention to summer hotels:

The development of our Division of Building Inspection has enabled us to improve our standard of building inspection and in this connection would advise that after a survey of some of the principal summer hotels by special inspectors of this Division it has been brought home to us that conditions existing in such institutions are in need of improvement.

All inspectors are requested to inspect the summer hotels coming within their respective districts, advising this office as to the fire exits, fire escapes, etc., bearing in mind that,

1st, There shall be two means of egress from all hallways or passageways.

2d, Such passageways must be connected to fire escapes or exits by "easily accessible and unobstructed openings."

3d, All exits to fire escapes must be plainly marked and "properly lighted."

4th, Exits through rooms will not be approved as unobstructed exits.

While making this inspection you will naturally note that the Female and Minor Labor Laws are properly enforced, and the condition of boilers and elevators and general housekeeping methods.

Fire Escapes.

Town.	Building.	Architect or Contractor.	Owner.
Cresco, ...	Cottage, ...	Scranton Iron & Steel Co., ...	Brewer, ...
Cresco, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Rudolph, ...
Pocono, ...	Hotel, ...	Scranton Iron & Steel Co., ...	Mt. Airy House, ...
Mt. Pocono, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Elvin, ...
Pocono, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Forest House, ...
Cresco, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Cliff House, ...
Mountain Home, ...	Hotel, ...	Scranton Iron & Steel Co., ...	Pleasant Ridge House, ...
Cresco, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Nearbrook, ...
Williamsport, ...	Hotel, ...	National Foundry & Supply Co., ...	Federal Hotel, ...
Williamsport, ...	Apartments, ...	National Foundry & Supply Co., ...	B. Lippoli, ...
Ralston, ...	Hotel, ...	National Foundry & Supply Co., ...	Central Hotel, ...
Altoona, ...	Rooming house, ...	National Foundry & Supply Co., ...	G. W. Witters, ...
Reading, ...	Hotel, ...	W. L. Kiefer, ...	J. F. Moser, ...
Boyetown, ...	Apartments, ...	W. L. Kiefer, ...	Blood, ...
Apollo, ...	Lodge hall, ...	Gary, Kissane, Hampton Co., ...	Knights of Malta, ...
Noblestown, ...	Hotel, ...	Taylor & Dean, ...	Louis Felek, ...
Williamsport, ...	College, ...	Woodnut & Schmol, ...	Dickinson Seminary, ...
Reading, ...	Apartments, ...	George R. Seifert, ...	Elizabeth Whitaker, ...
Stroudsburg, ...	Hotel, ...	Scranton Iron & Steel Co., ...	Highland Inn, ...
Pittston, ...	School, ...	Scranton Iron & Steel Co., ...	Cork Lane School, ...
Pocono Pines, ...	Hotel, ...	Scranton Iron & Steel Co., ...	James E. Doney, ...
DuPont, ...	School, ...	Scranton Iron & Steel Co., ...	Lincoln Street School, ...
Mt. Pocono, ...	Hotel, ...	Scranton Iron & Steel Co., ...	The Ontwood, ...
Butler, ...	Factory, ...	Scranton Iron & Steel Co., ...	Standard Steel Car Co.
Butler, ...	Office building, ...	Kerstone Ornamental Iron Works, ...	Blake, ...
Altoona, ...	Factory, ...	Geo. W. Anne & Son, ...	Boyetown Casket Co.
Boyetown (Topton), ...	Hotel, ...	G. C. Freeman, ...	F. S. Kutz, ...
Fleetwood, ...	Apartments, ...	W. E. Reupplis Co., ...	W. F. Lamb, ...
Braddock, ...	Lodge Hall, ...	S. Stahl, ...	Braddock F. & A. M.
Nazareth, ...	Factory, ...	Buechle Iron & Tool Works, ...	Nazareth Waist Co.
Lynnwood, ...	School, ...	F. N. Peter & Bro., ...	Lower Chichester Township, ...
Trainer, ...	Apartments, ...	W. A. Courtney, ...	J. E. Spencer, ...
Altoona, ...	Apartments, ...	Geo. W. Anne & Son, ...	Est. of M. C. Tulis, ...
Easton, ...	Apartments, ...	Ed. Paul Richter, ...	Est. of Elizabeth Timmins, ...
Bloomsburg, ...	Store, ...	Noe-Wadlow Co., ...	F. P. Pursell, ...
Harrisburg, ...	Factory, ...	Smith Fence & Iron Works, ...	N. Friedenber, ...
Marcus Hook, ...	Butler, ...	W. W. Lindsay Co., ...	Congoleum Co.
Altoona, ...	Lodge hall, ...	Taylor & Dean, ...	W. G. Ziegler, ...
		F. J. Shollar & Son, ...	P. O. S. of A.

Theatres.

Town.	Building.	Architect or Contractor.	Owner.
Allentown, ...	Theatre, ...	E. C. Horn & Sons, ...	Wilmer & Vincent.
Endeavor, ...	M. P. T., ...	Brockway & McNeil Co., ...	G. E. Warden.
Chester, ...	Theatre, ...	The Hoffman Co., ...	Edgmont Co.
Emaketon, ...	M. P. T., ...	Fred I. Merrick, ...	Andrew Rapp. Co.
Midland, ...	M. P. T., ...	John H. Harmon, ...	Midland Imp. Co.
Fairchance, ...	M. P. T., .....	.....	White Rock Theatre Company.
Boardman, ...	M. P. T., .....	.....	A. C. Robinson.
Braddock, ...	M. P. T., .....	.....	J. H. Sarver.
Snowshoe, ...	M. P. T., .....	.....	L. C. Menchio.
Warren, ...	M. P. T., .....	.....	J. A. Simmons.
Endeavor, ...	M. P. T., .....	.....	G. E. Warden.

Buildings.

York, ...	Lodge building, ...	Billmeyer & Gemmill, ...	L. O. O. M.
York, ...	College, ...	J. A. Dempwolf, ...	York Col. Institute.
Reading, ...	Apartment house, ...	Wm. A. Fink, ...	Mrs. Mary Adams.
Warren, ...	Offices and apartments, ...	Hersh & Hersh, ...	Conewango Trust Co.
Sunbury, ...	Loft and apartments, ...	W. Douden, ...	J. F. Cummings.
Ambley, ...	Opera house, ...	Kearsey & Mattison Co., ...	Ambley Opera House.
Clearfield, ...	Factory, ...	Ashley Itshel, ...	Clearfield Overall Co.
Lancaster, ...	Y. W. C. A., ...	Henry Y. Shaulb, ...	Y. W. C. A.
Reading, ...	Office building, ...	George L. Gerhard & Son, ...	Amer. Cas. Co.
Columbia, ...	Factory and store, ...	Granville E. Pauls, ...	C. A. Herr.
Harrisburg, ...	Factory, ...	C. G. Cooley Co., ...	Penna. Milk Prod. Co.
Altoona, ...	Lodge hall, ...	F. J. Shollar & Son, ...	P. O. S. of A.
Altoona, ...	Store and apartments, ...	F. J. Shollar & Son, ...	M. Papadeas.
Evans City, ...	Hall, ...		C. E. Glenn.

Bakeries.

Richland, ...	Bakery, ...		Edwin C. Fritz.
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Blowers.

Boycertown, ...	Factory, ...	Sterling Blower Co., ...	Union Mfg. Co.
Wilmerding, ...	Shops, ...	Ohio Blower Co., ...	Westinghouse Air Brake Co.

Toilets.

Franklin, ...	Factory, ...	Venango Mfg. Co.
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Summary.

Fire escapes, ...	40
Theatres, ...	31
Buildings, ...	14
Bakeries, ...	1
Blowers, ...	2
Toilets, ...	1
Total, ...	69
New plans received during month of October, ...	78
Revised plans received during month of October, ...	26
Total, ...	102

*Fire Escapes Ordered During the Month of October, Department of
Labor and Industry, Bureau of Inspection.*

Town.	Name and Location.
Wyoming, ...	Miss A. Polen.
Linwood, ...	Lower Chichester Twp. School Board, Boothwyn Road.
Juniata, ...	Rev. A. Lambertson, 520 Sixth Ave.
Philadelphia, ...	Louis F. Marquet, 4800 Baltimore Ave.
Wyoming, ...	Wm. Wheeler, Wyoming Ave. & Eighth St.
Harrisburg, ...	Max Lane, 1022 Market So. (Apt. House).
Perkasie, ...	Northampton Silk Co.
Easton, ...	Elizabeth Timmons Est., 203 Northampton St.
South Bethlehem, ...	Sol. Strauss.
South Bethlehem, ...	Wm. Rapsber.
Easton, ...	Nathan Atkain, 446 Washington St.
Easton, ...	J. J. Detweiler, 2 fire escapes.
Parsons, ...	U. R. I., I. O. O. F. (Lodge).
Freemansburg, ...	Jos. Jorosz (Hotel).
Lewistown, ...	H. J. Cohen Building (Store).
Reedsville, ...	Joseph Kelley (Planing Mill).
Reading, ...	Commercial Trust Co., Executors of Wm. P. Stauffer Est., 609 Penn St., Reading, Pa.
Easton, ...	B. D. Mayer, 468 Northampton St.
Towanda, ...	Citizens' National Bank.

Division of Boiler Inspection.

Of the 2172 inspections, made during the month of October, of boilers coming under the jurisdiction of the Department of Labor and Industry, there was only one reported condemned, although in sixty-six instances serious defects were discovered and immediate steps were taken for correcting the defects. The minor defects were numerous and the Division of Boiler Inspection has been very busy giving instructions for correcting evils and advising operators on the proper care and maintenance of boilers.

The following is a summary of boiler inspections during October:

Total inspections during October, ...	2172
Internal inspections during October, ...	1645
External inspections during October, ...	927
Internal corrosions, serious, ...	8
Internal corrosions, minor, ...	241
External corrosions, serious, ...	1
External corrosions, minor, ...	48
Pitting, serious, ...	11
Pitting, minor, ...	134
Grooving, minor, ...	8
Defective tube ends, minor, ...	195
Defective furnaces, minor, ...	154
Fractures, minor, ...	14
Defective water guages, ...	95
Defective safety valves, ...	46
Defective pressure guages, ...	51
Broken stays, ...	63

Bulges, ...	119
Unclassified defects, ...	774
Condemned, ...	1
Suspended, ...	9
Manufacturing companies reports of new boilers furnished,.....	38

Division of Elevator Inspection.

An inspector from the Division of Elevator Inspection, of this Department, while examining a passenger elevator, equipped with an air cushion, found that one of the shackle fastenings on the car was about ready to part. It was also discovered that a pin through the safety jaw was almost sheared through. The agent for the building, in which the elevator was located, was at once advised that unless immediate attention was given the elevator, it might drop into the air cushion pit. The agent promised the inspector that the elevator would not be used until it was repaired.

For some cause, in spite of the warning, and the promise to make immediate repairs, the car was again placed in operation and the two shackle fastenings broke when the car was at the second floor. The result was that the car dropped with three passengers. Fortunately none of them was hurt although the elevator car was damaged. In this instance considerable expense would have been saved had the inspector's warning been given immediate attention and the hazard to passengers would have been eliminated. The repairs ordered by the inspector would have cost about \$5 and a loss of two hours operation of the car. Following the accident, the car was out of service for three days and the repairs cost \$140.

A more serious accident occurred in a six-story building when a boy, on the top floor lifted a safety gate on a freight elevator hatchway, and, losing his balance, fell into the elevator shaft. He landed on the guard screen protecting the top of the car and sustained only a broken leg. Had the guard screen not been on the top of the car, the boy's injuries would probably have been more serious and occupants of the car would have been endangered. Frequently, when an inspector recommends such a guard screen for the top of a freight elevator the owner fails to see its advantage. It is primarily a protection for workmen on the car in case any object falls into the elevator shaft-way.

Employment of Minors in Bowling Alleys.

The Bureau of Inspection of the Department of Labor and Industry has received, from the Department of the Attorney General, an opinion setting forth that:

"It is unlawful for a minor under sixteen years of age to be employed in a public bowling alley, and that in pursuance of said Act

of 1905 it is unlawful for the licensed keeper of a public bowling alley to allow or permit a minor under eighteen years of age to be present in such place as a patron, frequenter, loiterer or in other like way or manner, but that the said Act of 1905 did not make the employment of a minor under eighteen years of age unlawful in such place.

It may be noted that while the Act of 1915 specifically charges the Commissioner of Labor and Industry with the duty of enforcing it, he is not so charged by the Act of 1905."

PREVENTABLE ACCIDENTS.

While a telegraph operator was engaged at his work, a cinder lodged in his eye. He remained at work three days following the accident, when the eye became very sore, and on seeking medical attention found it was too late. The eye had become infected, resulting in death fifteen days after the injury occurred.

All injuries should receive prompt attention, even if they are trivial. It is highly important that the person who gives the preliminary treatment should be qualified, and that he should thoroughly understand the ways in which he can do harm, as well as those in which he can do good.

Injuries to the eyes should receive special attention, because serious consequences, similar to the above, may result.

Infection Results in Death.

An employe of a munitions plant, while placing a shell on an engine lathe, bruised his hand, and failed to report the injury, or to have same treated. He continued at work until the bruise became infected and he died from septic pneumonia due to the infection eight days after the injury was received.

Cleaning Machinery While in Motion Results Fatally.

While engaged in cleaning the floor near a rapidly revolving shaft. the broom, the employe was using, in some manner caught in the shaft and flew up, striking him under the chin—causing an incised wound of the throat. Death resulted four hours after accident occurred.

The cleaning, oiling, repairing or adjusting of machinery while in motion is a dangerous practice, and should be prohibited.

Set Screws Cause Death.

An employe of an agricultural implement company was sent by his firm to adjust the clutch on a combination engine and hay press, which had been slipping. After his arrival at the place where the engine and press were being operated, he soon remedied the difficulty.

He was standing sideways to engine, watching it operate, when all of a sudden, he seemed to sway toward the machine, having apparently slipped which caused him to lose his balance. His coat sleeve catching on the set screws which are used in adjusting the clutch, he was whirled off his feet and around the wheel, (which was making 400 revolutions per minute)—striking his head on the brace of the truck, killing him instantly.

BUREAU OF STATISTICS AND INFORMATION COMPILES INDUSTRIAL ACCIDENT DATA SHOWING 230,221 PENNSYLVANIA WORKERS KILLED AND INJURED DURING THE FIRST ELEVEN MONTHS OF 1916.

More fatalities occurred as a result of accidents in Pennsylvania industries during October than in any preceding month of this year. The October record of 287 employes killed exceeds the August total, the next highest by 41. The total number of killed and injured during October, 21,565, was exceeded during several months of this year. The daily average of killed and injured during October was 829.

During the month of November 220 workers were killed and 20,378 was the total of killed and injured. The daily average during November was 784.

These figures, compiled in the Bureau of Statistics and Information show that the total number of employes in Pennsylvania killed and injured up to December 1, aggregates 230,221. Of that number 2,334 were killed. For every day of 1916, up to December 1, there have been 825 industrial workers killed or injured. The monthly average is 212 killed and 20,929 killed and injured. The complete record of

killed and injured in the industries during the first eleven months of 1916 is as follows:

Month.	Killed.	Killed and Injured.	Daily Average.
January, ...	129	13,465	518
February, ...	222	24,475	979
March, ...	239	26,971	999
April, ...	169	18,010	720
May, ...	195	18,379	735
June, ...	182	19,939	767
July, ...	200	21,023	841
August, ...	246	23,817	882
September, ...	245	22,194	888
October, ...	287	21,565	829
November, ...	220	20,378	784
Totals, ...	2,334	230,221	825
Monthly average, ...	212	20,929	....

BUREAU OF MEDIATION AND ARBITRATION ACTIVE IN ADJUSTING LABOR DISAGREEMENTS DURING OCTOBER.

The Bureau of Mediation and Arbitration received reports of 26 strikes, involving 8,826 employes, during the month of October. Many of these labor disagreements occurred in the bituminous coal fields and in that section Patrick Gilday, Chief of the Bureau, concentrated his efforts during virtually the entire month. The number of strikes reported in October show a decrease under the number reported in September.

Requests for the services of the Bureau of Mediation were received in some instances from employes and in others from employers and the ever increasing requests for the services of the Bureau have compelled Commissioner Jackson to assign, whenever possible, suitable and available men from other branches of the Department to aid in this important work for the benefit of both labor and industry.

The record of the strikes reported to the Bureau during the month of October is shown in the accompanying table.

Industry.	Location.	Number strikes.	Number employes involved.	Date mediator was requested.	Date of settlement.
Mining.....	Punkstutawney, ...	1	4,000	10-16-16	10-23-16
Mining.....	Vintondale, ...	1	400	10-20-16	10-27-16
Mining.....	Wehrum, ...	1	260	10-21-16	10-27-16
Mining.....	Allegheny Valley, ...	14	3,000	10-17-16	Pending.
Mining.....	Philipsburg, ...	1	76	10- 9-16	10-11-16
Mining.....	Robertsdale, ...	1	.....	10-19-16	Pending.
Mining.....	Defiance, ...	1	350	10-30-16	Pending.
Mining.....	Philadelphia, ...	2	300	10-21-16	Pending.
Teamsters.....	Philadelphia, ...	1	182	10-17-16	Adjusted.
Metal trades,...	York, ...	1	58	10-20-16	Adjusted.
Cigarmakers,....	York, ...	1	.....	10-30-16	Pending.
Leather.....	Philadelphia, ...	1	.....	10-30-16	Pending.
Clothing.....	Philadelphia, ...	1	200	10-30-16	Pending.

The methods employed by representatives of the Bureau of Mediation and Arbitration in efforts to adjust disagreements between employers and employes are clearly set forth in the following letter written by Patrick Gilday, Chief of the Bureau of Mediation and Arbitration, to a correspondent:

Have noted your letter carefully, and especially your question, what can we do, as mediators, of a constructive nature to prevent both employers and well paid and well treated employes against being misled in a way to destroy our effectiveness? There are many things which we do to prevent either side from being misled, wherever such a condition exists,—if our good offices are accepted by both sides,—so that we are able to work effectively.

Our first step is to ascertain the true and complete facts in the situation at issue as well as in other related situations as to wages, hours, etc., in like or similar industries, and lay this information before the parties at interest.

The State mediators in the broadest sense represent the public interest, in the conservation of a peace policy through reasonable and just settlements under the humane rule of mediation and arbitration and not in the processes of industrial war and strife.

The State mediators always try to exert an impartial endeavor to see that full justice is accorded both employer and employe. The success of the efforts of the mediators has been largely because they have been able to get both sides to *reason together* without passion or personal feeling.

The mediators have been able, many times, after they have surveyed the situation, to offer a plan which both sides can agree to, both sides knowing as they do, the

disinterested source from which such suggestions emanate. It is found in many cases that the services of the mediators have been of the greatest value in avoiding industrial trouble before a strike or lockout occurs, which in many instances happens through misunderstandings and a tendency for both sides to try their strength before getting the truth of the whole matter.

It has been well said by an eminent authority on the subject:

“Strikes cause losses, which, like a river, pass over the National Dam down the river of waste out into the open sea and never can again be used to turn the wheels of industry.”

To avoid and to reduce these losses to employer and employe is the object and endeavor of the mediators of the Department of Labor and Industry.

INDUSTRIAL BOARD ENDEAVORS TO PREVENT WORKING OF WOMEN AND GIRLS ILLEGALLY LONG HOURS DURING THE CHRISTMAS HOLIDAYS.

The Industrial Board and the Bureau of Inspection of the Department of Labor and Industry, made every effort prior to the Christmas holiday season to prevent the working of girls and women illegally long hours in stores and factories.

Inasmuch as the Woman's Law sets forth that, when an establishment is closed for a legal holiday, females may be employed, during such week, two hours a day overtime for three days, but the working hours for the week must not exceed fifty-four, there was some misunderstanding throughout the State due to the fact that Christmas comes this year on Monday and the definition of the week, when such overtime could consequently be included, was difficult to determine.

Representatives of mercantile bodies, in various cities, of the State appeared before the Industrial Board on the matter and asked for a ruling. The proposition was submitted to the Attorney General who rendered an opinion which concluded in the following language:

“I am of the opinion, and so advise you, that in pursuance of the provisions of Section 3 of the said Act the three days on which a female employe may be employed two hours overtime during a week in which a holiday occurs, and, is observed by an establishment em-

ploying her, are not confined to the calendar week in which the holiday comes but may be any three days of the 'seven consecutive days' within which such holiday falls, but that such overtime employment shall not operate to cause any such employe to work more than fifty-four hours within any seven consecutive days. Consequently, in effect, although the three days of overtime employment may come in the calendar week preceding the one in which a holiday occurs, if they be within seven days of such holiday, yet the total hours of employment throughout the entire calendar week in which the overtime work in such case is performed, can not lawfully exceed fifty-four. As above stated, the question relating to females under twenty-one years of age, working overtime after nine o'clock P. M., has been previously decided by this Department."

The Industrial Board further strengthened this ruling by adopting it formally as a ruling of the Board. In this connection, however, the Board invited employers to endeavor to arrange their female help in shifts so as to maintain the day's work for any individual as nearly as possible normal and under no circumstances to exceed eleven hours in any one day for any one employe. It also advised that care should be exercised in so arranging the shifts that young girls—those under twenty-one—shall be dismissed during the earlier hours of the evening. This latter arrangement is desirable partially to enable such young women to reach their homes in the early evening and partially by reason of the fact that the younger girls are more susceptible to injury through unduly extended and strenuous application to their work.

Warning Notice Sent from Department.

Several weeks before Christmas the following bulletin was sent State-wide from the Department of Labor and Industry:

The general public is urged to assist the Department of Labor and Industry in protecting women and girls from overwork through illegally long hours during the coming holiday season.

"Shop early," is the request to purchasers, and "sell early," is the advice to store owners.

Inspectors of the Department of Labor and Industry will concentrate in all sections of the State in an effort to enforce the Woman's Law in stores and factories prior to the Christmas rush, and also to warn proprietors of stores that inflammable packing material, waste paper and excelsior must not be allowed to accumulate in cellars and basements during the busy season.

Inspectors will co-operate with the heads of establishments explaining to them the requirements of the law and prosecutions will be instituted when violations are discovered.

Women may not be employed more than six days a week, fifty-four hours a week, or more than ten hours in any one day. If women are employed longer hours, the

law is violated, whether the store is open and the clerks are waiting on customers or if the doors are closed and the clerks are engaged in taking the "after-holiday" inventory.

Girls under twenty-one years of age may not be employed in stores or factories after nine o'clock at night nor before six o'clock in the morning. When an establishment is closed for a legal holiday, females may be employed, during such week, two hours a day overtime for three days, but the working hours for the week must not exceed fifty-four.

Child workers between the ages of fourteen and sixteen may not work more than fifty-one hours per week and eight hours of that time must be spent in continuation schools. Such children may not be employed later than eight o'clock at night nor before six o'clock in the morning nor may they be employed more than nine hours in any one day. No children under fourteen may be employed in any establishment.

BUREAU OF EMPLOYMENT WORK DURING OCTOBER.

The following tables show the placement work of the Bureau of Employment for the month of October. There was a greater number of positions open in October than in September, and fewer applicants to fill these positions. In September there were 2,509 openings and 2,723 applicants; in October, there were 2,659 openings and 2,559 applicants.

Bureau of Employment.

Placement Work for October.

	Harrisburg.	Philadelphia.	Pittsburgh.	Johnstown.	Altoona.	Grand total.
Persons asked for by employers, ...	437	1,186	789	180	67	2,659
Applications for positions, ...	317	1,317	843	60	22	2,559
Persons referred to positions, ...	222	1,121	544	55	26	1,968
Positions filled, ...	192	946	479	46	25	1,688

*Placement Work According to Class of Occupation for the Month of
October—Men's Department.*

Classes of Work Having the Highest Percentage of Openings

Laborers, ...	18.1 % of the total.
Machine workers, ...	17.3 % of the total.
Leather workers, ...	16.7 % of the total.
Clerks, stenographers, typists, ...	7.8 % of the total.
Carpenters, ...	3.7 % of the total.
Boiler makers, ...	3.4 % of the total.
Woodworkers, ...	3.1 % of the total.
Salesmen and solicitors, ...	2.3 % of the total.
Glass blowers, cutters, ...	2.2 % of the total.
Moulders, ...	1.9 % of the total.
Plumbers, ...	1.7 % of the total.
Electricians, ...	1.6 % of the total.
Painters, ...	1.5 % of the total.
Waiters, butlers, valets, ...	1.3 % of the total.

Classes of Work Having the Highest Percentage of Applicants.

Clerks, stenographers, typists, ...	15.3 % of the total.
Machine workers, ...	12.9 % of the total.
Laborers, ...	12.8 % of the total.
Salesmen and solicitors, ...	3.9 % of the total.
Plumbers, pipe and steam fitters, ...	2.9 % of the total.
Bookkeepers, accountants, ...	2.7 % of the total.
Waiters, butlers, valets, ...	2.5 % of the total.
Carpenters, ...	1.4 % of the total.
Bricklayers, ...	1.2 % of the total.
Farm hands and managers, ...	1.2 % of the total.

*Placement Work of the Women's Department of the Harrisburg and
Philadelphia Offices for the Month of October.*

Classes of Work Having the Highest Percentage of Openings

Domestic and personal service, ...	25.7 % of the total.
Day work, ...	13.2 % of the total.
Waitresses, ...	7.5 % of the total.
Clerks, ...	3.7 % of the total.

Classes of Work Having the Highest Percentage of Applicants.

Domestic and personal service, ...	24.8 % of the total.
Day work, ...	16.3 % of the total.
Clerks, ...	8.6 % of the total.
Waitresses, ...	3.2 % of the total.

*Placement Work of the Harrisburg Office for the Month of October—
Men's Department.*

Classes of Work Having the Highest Percentage of Openings

Boiler makers, ...	19.5 % of the total.
Machine workers, ...	15.4 % of the total.
Laborers, ...	12.2 % of the total.
Leather workers, ...	9.3 % of the total.
Carpenters, ...	8.5 % of the total.
Clerks, stenographers, typists, ...	6.7 % of the total.
Bricklayers, ...	5.8 % of the total.
Cabinet makers, ...	5.5 % of the total.
Farm hands and managers, ...	4.2 % of the total.
Electricians, ...	3.3 % of the total.
Salesmen and solicitors, ...	2.1 % of the total.
Plumbers, steam and pipe fitters, ...	1.8 % of the total.
Waiters, butlers and valets, ...	1.5 % of the total.
Bookkeepers and accountants, ...	1.3 % of the total.

Classes of Work Having the Highest Percentage of Applicants.

Farm hands and managers, ...	4.1 % of the total.
Laborers, ...	3.9 % of the total.
Bookkeepers and accountants, ...	3.1 % of the total.
Electricians, ...	2.7 % of the total.
Clerks, stenographers and typists, ...	2.2 % of the total.
Plumbers, steam and pipe fitters, ...	1.6 % of the total.
Salesmen and solicitors, ...	1.2 % of the total.

*Placement Work of the Harrisburg Office for the Month of October—
Women's Department.*

Classes of Work Having the Highest Percentage of Openings

Domestic and personal service, ...	35.2 % of the total.
Day work, ...	13.8 % of the total.
Waitresses, ...	7.6 % of the total.
Clerks, ...	3.1 % of the total.

Classes of Work Having the Highest Percentage of Applicants.

Domestic and personal service, ...	39.3 % of the total.
Day work, ...	18.0 % of the total.
Clerks, ...	8.1 % of the total.
Waitresses, ...	3.2 % of the total.

*Report of the Philadelphia Office for the Month of October—Men's
Department.*

Number of Applicants Asked for by Employers.

Laborers, ...	139 or 14 1/3 % of the total.
Semi-skilled, ...	226 or 23 1/3 % of the total.
Skilled, ...	417 or 42 13/15 % of the total.
Technical, ...	7 or 10 25/48 % of the total.
Clerical (commercial and sales), ...	184 or 18 15/16 % of the total.

Number of Applicants Registering for Positions.

Laborers, ...	68 or 10 1/30 % of the total.
Semi-skilled, ...	150 or 22 1/8 % of the total.
Skilled, ...	304 or 44 7/8 % of the total.
Technical, ...	6 or 1 5/6 % of the total.
Clerical (commercial and sales), ...	150 or 22 1/8 % of the total.

Women's and Girls' Department.

Number of Applicants Asked for by Employers.

Sales and office workers, ...	28 or 13 1/7 % of the total.
Domestic and personal service, ...	113 or 53 1/10 % of the total.
Factory workers, ...	72 or 33 3/4 % of the total.

Number of Applicants Registering for Positions.

Sales and office workers, ...	36 or 28 1/8 % of the total.
Domestic and personal service, ...	70 or 54 5/8 % of the total.
Factory workers, ...	22 or 17 1/4 % of the total.

Report of the Pittsburgh Office for the Month of October.

Requests for Laborers, Skilled Mechanics, Clerks and Workers in Special Lines.

Boys, ...	21 about	2%
Domestics, ...	43 about	6%
Elevator operators, ...	12 about	1%
Factory workers, ...	17 about	2%
Farm hands, ...	10 about	1%
Hotel and restaurant help, ...	35 about	5%
Laborers, ...	256 about	36%
Laundry workers, ...	30 about	4%
Miners, ...	98 about	14%
Railroad hands, ...	23 about	2%
Tradesmen, ...	128 about	18%
Clerks, ...	less than	5%

Applications for Positions.

Applications of tradesmen, highest, ...	30%
Applications of clerks next, ...	23%
Applications for hotel and restaurant work, (including cooks, porters, waiters and dish-washers), ...	10%

In the Division of Complaints against private employment agents, there were 21 complaints received during the month of October, in which applicants for positions, demanded a refund of their fees, claiming that the agents had given unsatisfactory service. Eleven of these proved to be without foundation, and the agents involved were entitled to retain their fees. Ten when investigated proved the agents at fault, and fees amounting to \$26.50 were returned to applicants.

In the Division of Law Enforcement, there were three violations of the Employment Agency Act, by persons running employment offices without licenses. Two cases were dismissed because of insufficient evidence; the third party was fined \$50.00 and costs, amount to \$3.45.

There were three arrests made during the month for violating the Employment Agency Act. One party was fined \$50.00 and costs, \$3.45, which amounted to \$53.45. The second party was dismissed with the payment of costs. The other case, involving two men, was dismissed on account of insufficient evidence.

The Bureau is just starting its second year and the outlook for useful activity is very encouraging. It is hoped that the new year will see splendid results.

BUREAU OF WORKMEN'S COMPENSATION COMPILES STATISTICS REGARDING COMPENSATION AGREEMENTS UP TO NOVEMBER 1.

The number of compensation cases from January 1, to November 1, 1916, was 65,820. Of this number, 2,113 were fatal cases the others were of disability for more than 14 days. For the total number of cases, 41,000 compensation agreements had been approved up to November 1.

During the month of October, contracts for compensation to be ultimately paid for fatalities, according to approved agreements, aggregated \$618,872.50. Compensation paid for fatalities during the month of October amounted to \$25,671.52. Compensation for disability paid during October amounted to \$176,357.11. Of the 2,113 fatal compensation cases 896 agreements had been approved by

the Board up to November 1. The amount ultimately required to pay the dependents of these 896 accident victims is \$2,263,003.24. The total amount of compensation paid for fatalities to November 1, was \$95,133.88. The total amount of compensation paid for disability cases to November 1, was \$896,569.99.

Up to November 1, there had been 1,388 claim petitions for compensation filed at the Bureau, and, of that number, about one-fourth had been settled by the filing of compensation agreements, largely through the efforts of the referees, prior to the time set for the hearings.

REPORTS ON TWO UNUSUAL CASES COMING UNDER COMPENSATION.

Case 1. Crush of left arm, followed by infection of the wound with gas producing micro-organisms.

F. J., age 44, employed in a metal refining plant, where copper is reclaimed from ashes, on July 29, 1916, caught his left arm in a crushing machine and received severe injuries to the bone and soft tissues. The injured man was immediately taken to a hospital.

July 31—The arm was very painful. There was offensive odor around the injured parts.

August 1—Amputation of the arm was performed at the junction of the upper and middle thirds. On making an incision for the outer flap, gas bubbles emanated from the wound. The necrotic subcutaneous tissue was cauterized with 95 per cent carbolic acid.

August 2—The odor about the stump was very offensive. All the dressings were soaked with a foul, thin exudate. No pus was present in the wound. The muscles were very dark in color, soft and foul smelling. Marked crepitation was present all over the stump. The temperature rose to 103.1 degrees F. in the afternoon. The patient was very dull. Dressings and stitches were removed, and the stump exposed to the air and irrigated with peroxide of hydrogen.

August 3—There were present marked crepitation in both flaps, a thin reddish discharge, and the muscles were soft and of a grayish color in spots.

August 4—The laboratory reported the culture positive for gas forming bacilli (*Bacillus aerogenes capsulatus*). The temperature was 101.3 degrees F., pulse normal. The muscles were of a uniform gray color. Crepitation was disappearing from the axilla. The treatment consisted of irrigation with peroxide of hydrogen and the application of tincture of iodine to the open wound.

August 8—The temperature was normal. There was induration in the external flap. The general condition was good.

August 12—There were present some sloughing of the muscles, and slight crepitation. The temperature continued normal, the wound becoming clean. The patient was out of bed.

August 14—No crepitation was present in the tissues. All sloughing muscles were cut off.

August 20—The stump was clean, with healthy granulating tissue beginning to appear in the wound.

August 25—The flaps were approximating, and the general condition improving.

August 28—The granulations were rapidly multiplying.

September 2—The stump was covered with healthy granulations and the patient discharged from the hospital for further treatment at the dispensary.

Gas gangrene, fortunately, is not a common infection; it may, however, develop in any commonplace wound, and is rapidly fatal, if not speedily controlled. A very large proportion of the patients die.

The entrance of the gas forming bacilli into a wound produces a condition which is characteristic in its clinical entity, and horrible to the sight. The tissues about the wound become swollen, break down, and fill up with gas formed by the growth of the invading bacteria. Crepitation or a crackling sound is produced by moving or touching the affected tissues. The wound discharges a dark red, frothy and foul smelling fluid. Usually early amputation of the parts involved is necessary to save the patient.

The infecting micro-organism thrives only in the absence of air, and dies when exposed to the air, a condition which is termed "an-aerobic." It follows from this fact that if the wound is opened widely and continuously exposed to the air, the germs will die, and the disease be checked. In addition to this wide exposure of the wound, gauze drains are employed to remove the infectious material, and the wound irrigated with antiseptic solutions, as peroxide of hydrogen or hypochlorite of soda, to prevent further growth of the bacteria.

This is the method of treatment now in vogue, and marvelous results are obtained from it. The temperature soon falls to normal,

the discharge lessens, the gas disappears from the tissues, and all conditions rapidly improve.

Case 2. INDUSTRIAL ANILIN POISONING.

C. G. age 48, while employed in a dye factory, was exposed to the poisonous fumes emanating from an anilin tank, by the breaking of a spigot. This accident occurred three times in two days.

Following this exposure, the man complained of the following symptoms: Considerable coughing and expectoration; burning taste in the mouth; severe headache; face and hair yellow; lips blue; marked shortness of breath; dizziness; dark colored urine; pain and tenderness in the abdomen; weakness in the legs; extreme nervousness. He was taken home, and soon fell into a deep sleep. Some hours later his wife could not arouse him, and he was then sent to a hospital.

The blood examination showed a marked reduction in the number of red blood cells and in the percentage of blood pigment. The patient was confined to bed for two weeks. During this time, all the symptoms cleared up except the weakness in the legs, the dizziness and the anemia. The patient was discharged from the hospital in thirty-three days as much improved, and referred to the dispensary for further treatment.

Three months later, the patient still had marked weakness in both legs, and was very unsteady on his feet. The following month, he improved rapidly, and had only a slight residual motor weakness in the right leg, which subsequently cleared up.

In America, anilin is used in the industries to make anilin dyes, rubber compounds, and in reclaiming rubber from scrap. Our supply of anilin formerly came from Germany. When the European war recently cut off our supply of anilin and its allied compounds, American industry set to work to meet this want by manufacturing them, so that now workers in this industry are exposed to the dangers not only attending their use in the rubber industry, but also in the manufacture of anilin products. Hence industrial anilin poisoning has suddenly attracted considerable attention by bringing new problems before physicians and sanitarians. It is, therefore, important that the medical profession should be able to recognize the symptoms of poisoning from anilin and its allied products, and should appreciate their seriousness.

The process of manufacture of anilin products starts with coal tar—a mixture of benzene, toluene, xylene and other volatile poisons. Nitric and sulphuric acids are added to benzene to form nitrobenzene; and the nitrobenzene is reduced to anilin by using iron filings and hydrochloric acid. The dyes are formed by the action of nitrous

acid on anilin and its allied amines. Poisoning may therefore result from exposure to numerous volatile substances, as benzene, nitrobenzene, anilin and numerous by-products.

The symptoms referable to the whole group of anilin products are as follows: Flushing of the face, which subsequently becomes blue and sometimes purplish; drowsiness; tired feeling; parched throat; difficulty in swallowing; pulse, rapid and weak; temperature, sub-normal. In severe cases, there is marked shortness of breath, confusion of mind, and finally loss of consciousness; this may occur suddenly or be delayed.

Recovery is usually prompt in the milder cases; the blueness of the face however, may persist for several days. In more severe cases, recovery may not take place for several weeks. It is said some men acquire a tolerance to the poison, but usually there is increased susceptibility after an acute attack.

In chronic cases, there is headache, nausea, dizziness, twitching of the muscles, disturbances of vision and loss of strength. The skin is livid and sometimes jaundiced.

The diagnosis is made from the following conditions: Anemia, dark colored urine, cyanosis, odor of anilin on breath, rapid and low tension pulse, shortness of breath, nervous disturbances and employment in the anilin industry.

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MONTHLY BULLETIN INDEX

PENNSYLVANIA

Department of Labor and Industry

JOHN PRICE JACKSON, Commissioner



1916

Volume III.

(Nos. 1-12)

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1917



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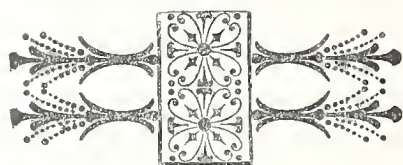
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